The impact of the Lamosangu-Jri road on the life experience and reproductive behaviour of women of the Tamang community of Jetthul, Nepal.

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The impact of the Lamosangu-Jiri road on the life experience and reproductive behaviour of women of the Tamang community of Jetthul, Nepal.

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Abstract

This thesis examines the linkage between road construction, female development and fertility among women of two rural Tamang communities in Jetthul, Nepal. Completion of the all-weather road between Jetthul and Lamosangu in 1980 created a motorised link with Kathmandu. Taking an integrated approach, aspects of development and female life associated with fertility decline are examined within the limitations of a *post hoc* study. Using a combination of ethnographic and quantitative survey techniques, links are traced between the advent of the road and changes in female employment, urban and media exposure, education, autonomy in marriage and reproductive behaviour.

Investigation reveals women have not become frequent road users. In maintaining subsistence activities and childcare, they remain closely bound to family-based, agricultural production within the village sphere. Although female contact with urban centres has increased since the advent of the road, it remains low, relative to that of men, the majority of whom seek waged employment outside Jetthul. Although school attendance has commenced among girls since the inception of road construction, rates of completion of primary school and literacy are very poor. Contact with mass media is low in the village setting, but since the opening of the road, young women have gained access to cinema and video in Kathmandu. Although the incidence of forceful capture marriage has declined since 1980, there is no detectable increase in female autonomy in the nuptial process. While female age at marriage has increased, since road provision, there has been a significant decrease in the time lapse between marriage and first birth. This suggests the road has stimulated social change relating to intimate behaviour. Since completion of the road, little attention has been forthcoming from other development projects. Although the communities have received modest government agricultural and health assistance and have been visited by a mobile sterilisation camp, in-depth investigation at the micro-level has identified the inappropriate approach and subsequent failure of these limited programmes in Jetthul.

This thesis demonstrates that in the absence of female-centred project support, girls and women of poor rural communities are not necessarily advantaged during the early stages of development initiatives such as road building. Furthermore, in addressing high fertility among the majority rural population, a more integrated approach is required at the community level, to more fully incorporate women and girls into the national development process and support fertility decline.

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Chapter 1

Introduction

Nepal, perhaps more than any other country, is two societies, with the people of the valleys and lesser slopes, where roads and schools have penetrated, being part of the global network... But for a nationwide fertility transition, the all-weather roads, the schools and the health centres will have to penetrate to every part of the country. This is a developmental challenge more extreme and expensive than is faced by most countries.
J.C. Caldwell 1998:6

The Himalayan kingdom of Nepal is characterised by broad topographical, climatic, ethnic, linguistic and cultural diversity. As one of the world's poorest countries, it exhibits a low degree of development and very high population growth (UNDP 1998:21, 32,142; UNICEF 1995:76). In recent decades, His Majesty's Government (HMG), with assistance from national and international Non-Governmental Organisations (NGOs) and multilateral agencies, has endeavoured to develop the country's infrastructure, public health services and address high fertility. With a low level of urbanisation and the vast majority of Nepalese people living in rural areas, transport and communications have, since the 1970s, been considered essential to the process of development throughout the nation (UNICEF 1992:6). In spite of the rapid expansion in road and bridge building in recent decades (CBS 1992:127-135; Poudyal 1988:181), many communities remain several days journey from motorised transport and the majority of people living in the hills travel on foot along trails and transport goods on their backs and measure journey time in days, rather than miles or kilometres.

Blaikie *et al.* (1977) have made the following assessment of the objectives of the Nepalese government in developing the roads infrastructure in the last century:

> ...the stated concern of HMG that the building of roads ... linking different, and unequal regions should have the effect of reducing inequalities between those regions and also, through the more general economic and social impact of road provision, between different sections of the

population within each region" (Blaikie, Cameron & Seddon 1977:1).

Indeed, economic and social development strategies were central to the Lamosangu-Jiri Road Project (LJRP) and the accompanying Integrated Hill Development Project (IHDP), the primary objectives of which were:

> ... to promote economic and social development and to slow down the ecological degradation through improved utilisation of natural resources, generation of off-farm employment opportunities and reduction of the population growth. (INFRAS 1995a:1-2).

While the majority of research within the region of the Lamosangu-Jiri road has assessed socio-economic change on an area basis, impact upon women has been less clearly determined (INFRAS 1995; 1991; 1988). My own research, taking an integrated approach, makes detailed examination of changes in female life at the village level since the advent of the road. Given concern over Nepal's high rate of population growth (CBS 1995:2; IPPF 1994:15), I specifically investigate aspects of female social and economic development that are linked to fertility decline.

This thesis is based upon fieldwork, the main body of which was conducted between July 1989 and December 1991. It focuses in particular upon the lives of 82 Tamang women from the villages of Samche and Turana[1] in Jetthul Village Development Committee, Sindhupalchowk District, east-central Nepal, but also draws upon broader ethnographic material obtained from living in the village community and previous work in the region. In 1980, when the local section of the Lamosangu-Jiri road was completed, these communities were effectively brought within a day's journey of Kathmandu.[2] The advent of the road heralded a new era of potential for improved mobility, contact with urban centres and opportunities for participation in the wider economy and development. Using a combination of ethnographic and demographic methodology, my primary objective was to determine the effects of changes heralded by the road on elements of female life associated with fertility decline.[3] These include the nature of employment, experience outside the village, schooling, female autonomy and reproductive behaviour.

I begin this first chapter with a review of the development of the roads infrastructure in Nepal

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[1] To protect the privacy of individuals whose life and reproductive histories I examine throughout this thesis, I use pseudonyms in place of the names of people and their villages.

[2] The whole road from Jiri to Lamosangu was not completed until 1985 (INFRAS 1995a:3).

[3] Specific objectives are set out in the second section of Chapters 4 to 8 in which I relate my findings in Jetthul.

and in this context briefly discuss the evolution of the Lamosangu-Jiri road and methods by which its impact has been previously assessed. Section 1.2 sets out a brief overview of the literature on the social and economic impact of roads in Nepal, with particular reference to the effects on women. As a major concern of this thesis is the investigation of aspects of female life linked with demographic change, in section 1.3 I review the literature relating to key aspects of female development and fertility decline.

1.1 Development of the roads infrastructure in Nepal

Although the first motorable road in Nepal was completed in 1927, subsequently, there was a pronounced lack of development of engineered roads for several decades (Seddon & Shrestha 1998:4). Caplan (1997:612-613) provides a review of documentation that supports the conclusion that the principle reasons underlying the lack of road building in Nepal were political rather than technical:

> The poverty of road transport.... was quite clearly not due to any lack of technical ability ... Nepal's no-roads policy for very nearly 200 years following the founding of the state was dictated largely by its distrust of Britain's intentions in the region. ...it feared the possible military consequences of establishing a proper transport system...

It was not until 1965 that a 20-year road transport plan was launched and it was a further four years until the precursor of the Department of Roads was instituted (Ghimire 1999:5). Progress in this sector was slow. In spite of receiving a major share of the national development budget (44% was allotted to Transport and Communications in the First Five Year development plan in the years 1955/56 – 1960/61), Nepal's road network had only increased from just 376 km of motorable track in 1951 by approximately 1,000 km by 1961 (RAP 2000:6). With increasing foreign interest and bilateral assistance from the USA, China, India and the UK among others, the roads infrastructure had expanded to some 2,700 km by 1971 (RAP 2000:7).

Throughout the early development of the Nepalese roads infrastructure the principal motivation was strategic rather than the social and economic development of the most disadvantaged communities. As the RAP Impact Review notes (2000:3-4):

> During the period 1950 to 1970, a major emphasis on transport development planning in Nepal was underpinned, as far as HMG/N was concerned, largely by national security and 'nation-building' concerns. Many foreign donors also had strategic concerns at heart when financing the building of roads. Feasibility studies usually included some economic cost-benefit analysis, but this was usually perfunctory and regarded as of secondary importance, given the pre-existing commitment to build strategic roads.

Strategic interests of both national and international parties determined the geographical

placement of motorable roads, especially in the early phase of road development, as some of the following examples show. In the 1950s the Tribhuvan Rajpath was constructed as an Indian development initiative. This ran south from the capital to the Terai to form a link with India via Raxaul (Ghimire 1999:5). Multilateral assistance from America, Britain and Russia, among others, ensured continuation of the Mahendra Rajmarga (East-West Highway) that runs through the Terai almost parallel to the Indian border. Originally a domestic initiative to improve access and security, the project that began in the early 1960s faltered soon after, until foreign assistance was obtained (RAP 2000:7). In the early 1960s a further motorable road that ran along a north-south axis was constructed with Indian assistance. This, the Siddartha Rajmarga, linked the hill town of Pokhara to the Terai and the Indian border. China also constructed a north-south highway, the Arniko Rajmarga that provided a motorable link between Kathmandu and the Tibetan border at Kodari. This as Ghimire notes, "...combined with the Tribhuvan Highway [Rajpath] created a thoroughfare passage of motorable road from China to India through Kathmandu." (1999:5). The British built their main Gurkha recruitment centre in Dharan in the eastern Terai in 1951, and later invested in a military hospital and additional construction to house support services such as the Gurkha Re-integration Programme and Welfare Service. To serve the Gurkha camp, the British constructed and maintained roads from Dharan south to the Terai at Biratnagar and on to the Indian border at Joghbani. Later a road was constructed with ODA funding north from Dharan to Dhankuta, the principle town of the Eastern Development region (Nabarro & McConnell 1990:5).

Originally the 1965 20-year plan for road development had proposed the construction of a second east-west highway running through the middle hills and connecting with the existing parallel highway in the Terai via roads running north-south throughout the country. This was intended to provide widespread access and further economic links between hill regions and the Terai, but was never realised. The failure of this planned road, according to Ghimire, was largely due to the requirements and funding power of foreign agencies:

> ... in developing individual roads the influence of the neighbouring countries seems to have received paramount importance. Subsequently roads with India's or China's priority were build rather than following the priorities of the Perspective Plan. (1999:5).

Given that security and political motivation were the major determinants of early road construction in Nepal, there was a distinct geographic inequality in road provision. As Caplan (1997:610-11) notes, migratory patterns and trade flows were traditionally between the hills and Terai (north-south, which the second east-west highway and north-south roads network proposed in 1965 would have served), yet early road development at the end of the 1960s was

concentrated along an east-west alignment. At the beginning of the 1970s the focus of roads provision began to be directed much more towards aiding the state's economic development. From this time roads came to be regarded as central to the economic development of the country. As the RAP Impact Review notes:

> ... roads (the main form of transport infrastructure investment) were considered by most of those concerned *a priori* to be a necessary, if not sufficient, condition for development, and their potential economic benefits almost taken for granted. (RAP 2000:4).

The emphasis on roads as a panacea for the nation's development ills was reflected in the Fourth Plan, (1970/1 –1975/76), which stated that:

> ...the infusion of development ideas in accessible regions depends largely on the availability of adequate transportation. It is only through transport expansion that the development projects of all types can flourish together through mutual co-ordination and integration (HMG/N Fourth Plan 1972:118 as quoted in RAP 2000:16).

Indeed, in the Fourth Plan, the Transport and Communications sector was allocated over 70% of government spending. Although such a proportion of the budget has not been matched in this sector since, Transport and Communications has continued to receive substantial funding. This resulted in a subsequent growth in road-building in the far eastern, central and western hills (RAP 2000:16). Maintenance of existing highways was, however, neglected. As Ghimire (1999:6) remarks:

> Proliferation of roads became remarkable whereas there was remarkable deficiency in maintenance and rehabilitation. Thus, road deterioration became one of the major problem[s] during [the] mid-eighties.

By 1981/82 the concentration of resources into the national roads infrastructure resulted in the development of some 5,270 kilometres of paved, gravelled and earthen motorable surfaces (CBS 1989:257). This had increased to 7,330 km of recorded road by 1990 (CBS 1992:129-133). The road network of Nepal remains limited, however, with a national average road density of approximately 5 km of road per 100 square km, which is markedly lower than the average of 26 km of road per 100 square km of other Asian countries (Banskota 1997:1). It is also unevenly distributed, with a low density of roadways (around 0.6 km road per 100 square kilometres) in hill and mountain areas and a concentration in the Terai (13.4 km per square km) and Central Eastern and Western Development regions (Banskota 1997; CBS 1992:130, 132-133). Although the Swiss introduced a successful electric trolley-bus service between Kathmandu and Bhaktapur in the mid-1970s (CBS 1989:228), almost all other motorised vehicles on Nepal's road network are petrol and diesel-powered. The majority of these are old stock, imported second-hand from India, whose poor level of maintenance and repair

contribute to frequent breakdowns, excessive exhaust emissions and compromised safety. While intermediate means of transport such as bicycles and animal carts are used along roads and tracks in the Terai and the Kathmandu Valley for low cost local travel and haulage requirements, traffic along the Lamosangu-Jiri road tends to be motorised and therefore more costly. The majority of these vehicles are buses and trucks owned by more wealthy, higher *jat* (caste and ethnic group) individuals, notably Newars and Bahuns, who live outside the area, and most light vehicles (cars and motorcycles) belong to development projects and government departments (INFRAS 1991a:121, 126-127).

HMG Nepal has continued to place strong policy emphasis (and a substantial proportion of national revenue and aid disbursements) upon promoting rural development through road construction. Seddon and Shrestha (1998:12) comment that the Eighth Plan (1990/91 – 1995/6) issued towards the end of my field research: "...identified transportation infrastructure as a major problem for sustainable development of the rural areas of Nepal..." and priority was again given to promoting rural roads development in continued anticipation that better urban-rural linkages would improve farmers' access to agricultural inputs and marketing (Ghimire 1999:6).

1.1.1 Evolution of the Lamosangu-Jiri Road

During the 1970s the central role attributed to road transport development was extended into integrated rural development projects (IRDPs). By integrating road construction and concurrent development projects, IRDPs aimed to strengthen district level administration and services to provide development inputs and support to improve the food security and socio-economic conditions of poorer households (Nabarro & McConnell 1990a:4).

One of the earliest of the IRDPs was the Lamosangu-Jiri Road Project (LJRP), which together with the Integrated Hill Development Project (IHDP) (INFRAS 1991a:S-3), was designed to integrate rural development (INFRAS 1995a:v). The LJRP/IHDP was initiated by the Swiss Development Co-operation, in association with HMG Nepal, in the early 1970s, in response to the outcome of the earlier (1964-1971) Jiri Multipurpose Development Project (JMDP). The JMDP had attempted to alleviate poverty, food production deficits and malnutrition in the area by providing assistance in agriculture, livestock, forestry management and health inputs. It was concluded, however, that the project's development objectives were severely hampered by poor transport and communications, the inadequacies of which were considered to cause "... a major bottleneck for the development of the area." (INFRAS 1995a:1). The IHDP, established

in 1975, set out with the objectives of raising living standards though new means of income generation, improving education, access to health and family planning acceptance (Basler & Hofman 1975:11). Coverage extended along the road construction route through Dolakha and Sindhupalchowk, including the villages of Samche and Turana, upon which this thesis focuses, although the study villages received low IHDP intervention (INFRAS 1991:15; Pradhan 1985:9).

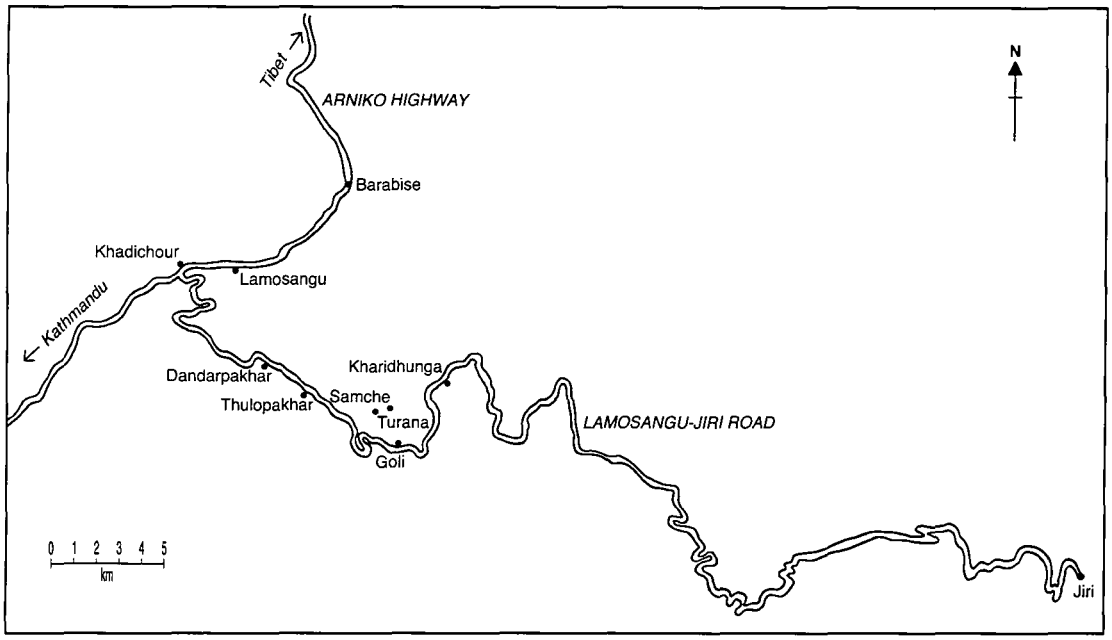

Figure 1.1: Map of the Lamosangu-Jiri Road

Construction of the road commenced in the early 1970s and was completed in 1985. It provided 110 kilometres of all-weather, metalled road surface between the town of Jiri in Dolakha District, west through eastern Sindhupalchowk District, where it connected with the Arniko Highway at Khadichour, near Lamosangu. This for the first time allowed year-round motorable access from eastern Dolakha, north to the Tibetan border and south to the capital, Kathmandu, which, as I set out in chapter 4, heralds new economic opportunities and development potential.

The process of monitoring the impacts of the LJRP/IHDP, largely conducted by the Swiss consulting group *Infrastruktur-, Umwelt- und Wirtschaftsberatung* (INFRAS), attempted to take into account social and economic development trends over the medium and long (a decade) term. The first two assessment rounds of 1986/87 (INFRAS 1988) and 1988/90 (INFRAS 1991a&b) focussed upon the impact of the road project (INFRAS 1988:4-5; 1991b:1). Similar analyses and interpretation of earlier methodologies were, however, deemed

unsuitable in the third and final round (1994/95). Given economic changes and the radical political transition that culminated in the formation of a multi-party democracy in 1990, it was concluded that "... the cumulative impact of many small social processes dilute[s] the cause-effect relationship between project interventions and observed changes." (INFRAS 1995a:v). Monitoring techniques were subsequently modified to assess development trends rather than particular impacts attributable to the road. Among the research strategies employed were *Photo Point Monitoring*, whereby 79 locations along the road corridor were photographed over time (at various dates during the 1970s, and during May 1989 and November 1994) and physical aspects of developmental change analysed visually (INFRAS 1995a:37-60). Qualitative data gathered through *Opinion and Perception Surveys* (Bajracharaya *et al.* 1995; Adhikary *et al* 1990; Sacherer 1990) were used to shed light on development trends with information collected from key informants representing the various sections of local society and their perspectives of developmental change (INFRAS 1995a:5). Micro-studies were conducted throughout the project area in 20 village-level *Special Monitoring Areas*. These locations were selected to provide a spectrum of project input intensities, such as high/low IHDP intervention and situations in relation to the Lamosangu-Jiri road, for example, at on- and off-road sites. In an attempt to facilitate comparative analyses, trends emerging from project areas were compared with those of reference locations in Okhaldunga in Dolakha District (situated approximately 45 km as the crow flies south-east of Jiri, with no motorable access) and in Palpa, with the Tinau Watershed Project/Palpa Development Programme (Helvetas/GTZ) (INFRAS 1995a:5-7). While monitoring yielded information concerning natural resource management, agricultural production, marketing, mobility and migration, economic and social developmental trends, there was markedly little research into how these changes affect women's lives.[4]

1.2 Gender and transport in Nepal

Acharaya and Bennett's extensive study of Nepalese women, that culminated in the publication of *The Status of Women in Nepal* series towards the end of the 1970s and in the early 1980s, broke new ground in focussing research on female life experience and assessing women's contribution to the household and national economy. Since this time, however, the cumulative body of research documenting Nepalese women's working lives and economic contributions has been limited (Panter-Brick 1987 & 1996; Thacker 1993; Acharaya 1991; UNIDO 1988; Bennett 1983:22-31). As I show throughout section 2.5 of the following chapter, it has only

[4] Findings concerning the early research into the impact of the LJRP and later monitoring of development trends is discussed in each chapter of findings.

been since the late 1970s that the role of women in the process of development in Nepal has been considered in development policy. Indeed, it was only effectively in the 6th Five Year Plan (1980/1 - 1985/6), that female participation in key aspects of development became policy issues, although as Ghimire points out, these were not strategically addressed (1999:8).

However, the situation in Nepal is characteristic of a global trend, whereby the specific inclusion in rural transport planning and implementation of women and gender *per se*, has only occurred in recent years (Fernando 1999:1). The British Overseas Development Administration (ODA) provides a case in point. In spite of having a policy of including women in development projects, the ODA-funded Kosi Hills Development Programme, a substantial part of which was the Kosi Hills Roads Project, failed to include women in its objectives or make rigorous investigations of project impact upon them (McConnell & Robins 1995). Indeed, in the majority of low income countries (LICs), transport development impact studies fail to evaluate key aspects of female development and well-being and these issues are often overlooked by major organisations involved in the funding and planning of rural roads (Bamberger & Lebo 1999). This is a cause for concern, given that rural transport research indicates that rural women in LICs spend more time than their menfolk in daily transport (Fernando 1998:65; Doran 1996:15). This situation is also apparent in the literature on roads research in Nepal. Although a relatively low proportion of research has examined the social and economic impact of road provision in Nepal (RAP 2000:3), in spite of Acharaya and Bennett's study highlighting the extensive agricultural and transport burden shouldered by rural women (1981:43), the effects of transport development on girls and women has been largely ignored. While some more recent projects such as the Local Roads Programme mentioned above, have encouraged women to work in road construction for equal pay to men (Banskota 1997:2-4)., they are often poorly represented in the workforce. The RAP quotes (RAP 2000:32) Acharaya's argument (2000:113) that such poor inclusion of women in construction labour is due in part to the gender discrimination of implementing local contractors and recruiters. As I show in chapter 4, however, even where local female wage labour opportunities exist, the heavy domestic and production burden falling on rural women restricts these options.

In reviewing many of Nepal's transport development projects and programmes up to the end of the last century, Ghimire (1999:11) concludes that apart from some projects' attention to women's labour input in road construction itself, very little attention was paid to gender issues. Seddon and Shrestha also comment upon the scant attention paid by transport monitoring and

research to the impact of transport development upon women and their integral role in the rural development process:

> In fact, however, reference to the role of women in transport development, or of the impact of transport development on women is rare in any of the existing documentation on rural transport development. (1998:18).

Indeed, even the most recent development framework of the Agricultural Perspective Plan (APROSC 1995) that takes the approach of developing rural transport to improve Nepalese agriculture and rural enterprise, does not, as Ghimire comments:

> ... mention anything on gender aspects as [sic] it relates to travel and transport. Even implicitly there are no gender considerations in these documents. ... The same is true in the planning context of individual transport improvement projects. (1999:8).

Given the concentration of the development budget and efforts on road provisioning (Poudyal 1988:181), the lack of monitoring and the consequential dearth of information concerning the implications of road construction on female life urgently needs to addressed. My own study combines an approach that focuses upon key aspects of female development associated with social and demographic change with research into the effects of the recently constructed road.

1.3 Social and economic impact of roads in Nepal

Since the end of the Second World War a significant proportion of development policy, planning and international assistance in LICs has concentrated on road provision. This emanates from acceptance of the core principle that a poorly evolved transport infrastructure severely hinders the potential for economic and social development (Edmonds 1997:1; Dawson & Barwell 1993:1-6). In order to promote economic connections through rural, urban and international linkages, many governments and foreign agencies have invested in the development of road networks as routeways for motorised transport. By the end of the 1970s the major proportion of transport funding in LICs was being channelled into highway construction and feeder-road development (ILO 1979). This has also been the case in Nepal, where during the 1960s and 70s: "...roads had come to equal development." (Caplan 1997:610) and poor transport infrastructure is still regarded to be the main constraint to agricultural marketing development (Thapa *et al.* 1995:1, 13-14).

In the short-term, road building has been found to have a significant economic impact on local communities in rural areas of Nepal. During the construction phase, people in the locality are able to gain waged labour within daily travelling distance of their homes, which enables cash generation without the need for migration. This is especially important for women with

children, whose access to waged labour outside the local area, I show in chapter 4, to be constrained by their domestic and subsistence responsibilities. Among the benefits of the early rise in cash income from local road construction work on the Kosi Hill Area Development Programme (KHARDEP) was a detectable improvement in the nutritional status of the community (Dunsmore 1987:45). Skills developed in road construction also improve the potential scope for future waged labour (Banskota 1997:2-4). In some projects, such as the Local Roads Programme in Dhading District, progressive standards of employment have been implemented, whereby women are paid at the same daily rate as men, children under 16 are not allowed to work and people from all *jats* are employed.

Longer-term economic changes associated with roads provision in Nepal are more mixed in their detectable benefits to local communities and vary with the resources and economic health of specific areas and the households within them. Although in recent decades HMG has placed strong policy emphasis on achieving rural development through road provision, early research conducted by the Overseas Development Group of the University of East Anglia, illustrated that contrary to assumptions, not all households situated nearby newly constructed or up-graded roads benefit equally (RAP 2000). Since then, monitoring of the impact of subsequent projects has confirmed that often the most disadvantaged households appear to benefit least from changes stimulated by local road development (Nabarro, Cassels & Pant 1989:71). Use of agricultural inputs and improvements in production and marketing have proven to highly dependant upon factors such as households' initial individual land holdings and livestock, proximity to the road and the presence and efficacy of integrated development projects (Nabarro & McConnell 1990:79-81; Adhikary *et al.* 1990:11-16). As monitoring of the Rapti Development Project (RDP) has illustrated[5] even where vulnerable sections of society are especially targeted by project intervention, they may fail to benefit to the extent of better-resourced neighbours. Central to the first phase of the RDP was the enhancement of ways of making a living of the most disadvantaged sections of the community, namely women and people of the lower *jats*. While roads development was credited with stimulating a shift in cropping patterns towards increased market gardening (JMA/IIDS 1995:24), the financial outlay and risk factors inherent in novel forms of production and marketing meant that only the better-off farmers ventured to take up such novel economic opportunities. Despite the fact that poor farmers and women were central to the original objectives of the Rapti Project and that they received targeted intervention from the *Small Farmer's Development Programme* and *Production Credit for Rural Women* (which I discuss in section 2.5 of the next chapter), it was

[5] Initiated in 1987, following the earlier Rapti Zone Area Development Project of 1980, an integral part of which was road provision and trail improvement.

reported that more vulnerable households required greater project inputs in order to more fully participate in the envisioned impacts of the road (JMA/IIDS 1995:62, 112). As HMG and concerned development agencies have concentrated upon roads as a means of facilitating agricultural marketing and economic growth in poor rural areas, the reported situation of the most vulnerable citizens remains of concern.

One of the most immediate and sustained economic changes following road construction that obstructs access of the poor to new enterprise opportunities is a pronounced rise in the prices of land adjacent to roads. Helvetas (1998:37) reported a five-fold increase in the value of roadside land following the upgrading of the Manigram-Rohini road in Rupandehi District and prices were observed to rise sharply from NR 5,000 to NR 80,000 per ropani following construction of the Bastari-Jhadewa road in Palpa. Communities become more incorporated in the cash economy following road construction (Adhikary *et al.* 1990:13-17) and due to the rise in the strategic and economic value of roadside land in rural Nepal, rather than local people filling new economic niches opened by local road provision, better resourced outsiders, such as established shop keepers, bus and truck owners tend to move in (Shrestha 1998:3; Zürcher 1995:51). The more costly locations, nearest road developments, are also better situated in terms of accessing health centres, schools, markets and places of work. This means that more prosperous sections of society gain most from the benefits emanating from road provision in rural areas since services are generally located in centres with good access (McConnell & Robbins 1995:67-70; Shepherd 1989:574-6). As Nabarro and McConnell (1990:75) point out, however, in much of rural Nepal even the relatively better off are poor and warrant project assistance.

The lack of capital and trade experience among poor farmers are often major determinants of their remaining in subsistence agriculture, rather than shifting into new venture opportunities arising from road provision (Shepherd 1989:577). This sometimes leads to wider local disparities in wealth and aggravates the precarious economic situation of the poorer sections of the community (Caplan 1997:620). Where the location of roads generate a relatively large gap in trade and service requirements, for example in areas where new routes pass though trekking and tourist interest, cash may be generated within villages, without the need for relocation. Entrepreneurial villagers with a small to moderate cash investment are able to establish tea shops and lodges in their homes and even the poorest individuals are able to fill the niche for local porters (Sacherer 1990:9). In areas where there are no natural or cultural features drawing outsiders and fewer opportunities for low-investment enterprise, many subsistence

farmers are increasingly seeking seasonal wage labour outside their home village and there is evidence to suggest that labour migration has increased with road provision (Sacherer 1990:8-9; Adhikary *et al.* 1990:17; Peet 1978:390). Because younger males from rural areas are most likely to leave those areas in search of work, for women remaining, the labour deficit means that their subsistence work burden is increased (Ghimire 1999:16). This aspect of road provisioning is poorly researched in Nepal and it has been noted that the effects upon women and children of increasing male migratory labour as a consequence of road provision are unclear (Nabarro *et al* 1989:71-72). In chapters 4, 5 and 6 therefore, I explore ways in which male labour migration encouraged by the Lamosangu-Jiri road has affected women's work and their own participation in education and new labour and travel opportunities offered by the road.

Customarily, many of the poorest men and women in rural Nepal supplement their income by haulage of goods on their backs (Acharaya & Bennett 1984:43). Portering is regarded as respectable and a flexible means of generating cash during slack periods in the agricultural cycle and on a casual basis to meet ongoing requirements. In some areas the demand for human load-carrying has reduced with road provisioning, as cheaper swifter motorised transport has become the primary form of haulage, damaging the fragile economies of some of the poorest households (Seddon & Shrestha 1998:33; Caplan 1997:623). In other areas, however, portering remains in demand following road construction, its location and nature having shifted from long-distance to shorter-distance routes (Blaikie *et al.* 1980:172).

The advent of motorised transport following road provision has not only facilitated labour migration, but markedly improved the mobility of many rural people in Nepal for social reasons (Seddon & Shrestha 1998:42-43; Zürcher 1995:52; Blaikie *et al.* 1977:71-3). Although a few studies have quantified female use of road transport (Shrestha 1998; IMU 1994), impact monitoring of the Lamosangu-Jiri road has not, however, revealed the proportion of travellers by gender, which I examine, along with changes in female transportation in chapter 5. Shrestha (1998:19) observed that rural Nepalese women not only travel more frequently, but do so independently and unaccompanied by male relatives. Increasingly unchaperoned exposure to life outside the family provides new social perceptions and options for young rural people, as I discuss in chapter 5. Although road construction cannot generally be directly and causally linked (beyond the concurrent provision of services) to aspects of female development such as increased participation in schooling, autonomy in spouse choice and changes in reproductive behaviour, that are strongly linked with fertility decline, ongoing

change at the national (mostly urban) level is expected to diffuse to rural areas via the increased urban-rural exchange (Caldwell 1998a:2-3; Bongaarts & Watkins 1996:656). This indirect relationship between increased accessibility, female social development and desirable demographic change, which has not been widely studied in Nepal, is explored in chapters 6, 7 and 8 of this thesis.

Although the research into the effect of road provision on female education and school provision in Nepal is scant, there is some evidence of higher school attendance and literacy in communities within road corridors, than in surrounding off-road communities, which is attributed to improved school provision and access. Seddon and Shrestha (1998:43) refer to two studies of educational change following construction of the Bhimdunga-Lamidanda road in Dhading District. Shrestha's (1998) study found that the increase primary school attendance over a five-year period was greater in roadside communities than in villages more distant from the road. Earlier, in 1994, the road's Impact Monitoring Unit reported near gender parity in school attendance in communities along the road, whereas in off-road villages the pattern of low female to male schooling prevalent throughout Nepal (CBS 1995:376) was still evident. The general increase in school attendance among children of communities in road project areas is associated with changing perceptions of the value of education (Nabarro & McConnell 1990:72). There is, however, also an important gap regarding research into social and economic factors mediating girls' access to school in Nepal. Although the school in the Jetthul community was built before the road was constructed, in chapter 6 I test the working hypothesis that general social and economic change stimulated by the shrinkage of distance to the capital and outside world will have exerted an influence by increasing parental acceptance of potential advantages of schooling and led to increased female attendance and literacy. As over the years there has been increasing school attendance and literacy and a gradual closing of the disparity between male and female education nationally (CBS 1995:381), the advent of the Lamosangu-Jiri road in providing rapid flow of movement with urban areas might arguably be expected to accelerate such a trend in Jetthul.

In recent years certain features of change encouraged by the rise in road access have presented a severe threat to the health, social and economic development of Nepal and to women and girls in particular. Men, and to a lesser extent women, have engaged in migrant labour and trade nationally and internationally for centuries (Watkins 1996:10-12; Ghimire 1994:4) and sexual encounters away from home have resulted in the importation of sexually transmitted infections (STIs) into Nepal and from urban to rural areas. Growing dependence upon the cash economy,

combined with increasing human movement enabled by development of the transport system over the last few decades, have contributed to the increasing trafficking of girls and women from rural to urban areas of Nepal and India to supply demand from the growing commercial sex trade (Schubert 1999:6; ILO 1998:4). These factors have placed the population of Nepal at risk from the spread of STDs, most importantly HIV/AIDS from India where the virus has diffused rapidly in the last few years (Seddon 1998:35). Although prostitution is also far from a modern phenomenon in Nepal (Ghimire 1994:4), women in particular have become more vulnerable to exploitation in the commercial sex trade, both within and outside the country. As the majority of poor Nepalese women have narrow options for income-generation and remain highly dependant upon marriage for economic security, marriage failure, lack of personal resources and rising consumerism have been strongly implicated in increasing the number of women in prostitution from all sections of Nepalese society (ILO 1998:4; New Era 1998; Malla 1997).

Aside from the negative lifestyle consequences and counter-development of increasing numbers of women entering prostitution at home and abroad, their health is jeopardised. Women return to their villages with a range of infectious diseases of considerable public health concern including TB, hepatitis-B and various STIs (Schubert 1999:21). Most importantly, the trafficking of women as commercial sex workers is regarded as a major route through which HIV infection is spreading through rural Nepal (Dixit 1990:27-28). Given Nepal's close proximity and economic links with India, the rapid increase in the HIV virus in the sub-continent has become of particular concern considering the volume of cross-border traffic and sex-trade connections (AIDSCAP 1997:6). Nepalese women are not only condemned to a life of misery through being recruited or duped into commercial sex work (Frederick 1998:15), but are completely at the mercy of unforgiving prejudice should they require care for debility resulting from their work. Association with STIs and sex outside marriage brands infected women as undeserving by society. When women become too ill to be commercially viable, often due to the symptoms of full-blown AIDS, they are ejected by their place of work, from where they return to Nepal. The poorly resourced health system not only has an infrastructure insufficient to cope with the influx of HIV and AIDS cases (Seddon 1998:36) but women in need of care are generally regarded as social pariahs, both by their families (Wadhwa 1998) and strategic public and healthcare workers (Pike 1999:3).

Although the quantification and mapping of HIV in Nepal has been poor since the first case was identified in 1988, studies in Africa have shown the incidence of the virus to be higher in

urban areas and along roads than off-road areas (Tanser *et al.* 2000; Serwadda *et al.* 1995). This suggests the potential importance of road traffic in the spread of infection throughout the Nepalese hinterland, and truck and bus drivers have in the past been regarded as being both victims and instrumental in the epidemiology of STIs (Malla 1997; Pande 1997; Amin 1996). Nepalese clients of prostitutes both within Nepal and abroad are predominantly young, married male migrant workers (AIDSCAP 1996), the majority of whom do not use condoms that might reduce STI transmission (New Era 1998; Gurubacharya 1994:46). It is estimated that up to 50% of HIV cases detected by mid-1997 were acquired in India (AIDSCAP 1997:6).

Monitoring of HIV infection in Nepal has been only rudimentary and the actual number of identified cases is relatively small. The National Centre for AIDS and STD Control reported 647 cases of HIV infection and a further 136 AIDS cases by mid-1997, but given the poor health and HIV/AIDS surveillance system, it is estimated that HIV infection may be 20-30 times the number of detected cases and AIDS 5-10 times those reported (AIDSCAP 1997:6). Authors have used the term "explosive" to describe the HIV epidemic among sections of Nepalese society, such as commercial sex workers and injecting drug users (Oelrichs *et al.* 2000). Seddon (1998:36) remarks:

> There is reason to believe that, over the next decade, the development of HIV-AIDS in Nepal will be dramatic, with substantial social and economic consequences for a country poorly equipped to deal with them. It is not alarmist, I suggest, to speak of a coming crisis.

Having reviewed the literature concerning the social and economic impact of roads, I now provide an overview of the linkages between the social and economic change that roads can encourage and fertility decline.

1.4 Development, socio-economic change and fertility decline

In the second half of the twentieth century, concern about population growth in LICs among economists, demographers and politicians stimulated debate and research into the dynamics of population in poor countries. During the 1960s, one of the most predominant views on population, that had its roots in Malthusian thinking (1992 [1803]), was termed 'demographic determinism'. The central tenet of this perspective was of inherent conflict between people and resources and that rapid population growth was the root cause of poverty, malnutrition and poor economic development. This view, encapsulated in Paul Erlich's (1986) classic work, *The Population Bomb*, asserted the necessity to reduce and *control* births in LICs to facilitate economic development. Some Asian countries, around this time, employed heavy-handed 'incentives' to persuade people to undergo sterilisation, in an endeavour to curb population

growth (Findlay & Findlay 1991:69-71).

Increasing concern about growing global population and its potentially detrimental effect on human development was addressed in the first World Conference on Population, held in Bucharest in 1974, organised by the United Nations Fund for Population Activities (UNFPA). Delegates from LICs presented a more social perspective of population dynamics in their countries. The force driving fertility was asserted to be poverty, which it was argued, focuses reliance upon offspring to renew family-based subsistence labour and provide security for ageing parents in the absence of welfare structures. This was supported by demographic transition theory that is based on analysis of demographic change in Europe between the 18th and 20th centuries and indicates that economic change and public health development that followed the Industrial Revolution led to a decline in mortality. After an initial rise in population growth, a marked and sustained decrease in the birth rate commenced (World Bank 1980; McKeown 1976:28-37). Within the framework of classical demographic transition theory, high fertility among agrarian populations was viewed as a natural response to high child mortality and production requirements. Mortality decline was understood to accompany socio-economic development, followed by reduced demand for children. Economic development, therefore, came to be regarded as the harbinger of fertility decline. With improving standards of living, it was asserted that children become economic burdens rather than assets, thereby reducing the support of high fertility in LICs. This view was encapsulated by the slogan of the Bucharest Conference: "Development is the best contraceptive".

Demographic transition theory, however, describes historical events that occurred in European populations. It has been argued that as the temporal, geographic and cultural antecedents were unique, the pattern of events precipitating European fertility decline cannot be expected to be mirrored in a wide range of modern settings whose common denominator is the term 'LIC' (Caldwell 1976:324). By the time of the second World Population Conference, held in Mexico in 1984, a more holistic understanding of fertility and a more integrated approach to achieving fertility goals was evident. The *Declaration of Mexico* highlighted the importance of integrating population and development programming and the importance of the role of women in strategy, within a framework appropriate to the national setting (Findlay & Findlay 1991:ix).

More recent research, using both historical European (Coale & Watkins 1986) and modern data pertaining to LICs (Cleland & Wilson 1987), interprets demographic transition to be less

dependent upon economic development because it occurs in poorly developed regions. Other research in modern developing countries, however, supports the view that socio-economic change does indeed propel demographic transition, and that the process of diffusion effects the spread of fertility decline to less-developed areas (Caldwell 1998a:2-3; Bongaarts & Watkins 1996:656; Retherford 1985). The outcome of recent research in a variety of country settings has therefore revealed no consistent or common cause of fertility decline. Prevailing development and population policy is reflected in the consensus reached at the 1994 International Conference on Population and Development held in Cairo, that demographic factors are both influential in and influenced by poverty and inequality, most importantly of gender. The Cairo Conference recommended enhancement of women's participation in "...all aspects of production, employment [and] income-generating activities" and recommended that governments should take steps to facilitate women "earn[ing] income beyond traditional occupations.... and ensure women's equal access to the labour market..." (UN 1994:24).

While there is no consensus on a theory of demographic transition in LICs (Cleland 1998:199) there is, however, a substantial body of research illuminating the relationship between certain social and economic factors and fertility. In order to ground my research within the context of wider understanding of development and socio-economic change, I explore the relationships between fertility decline and aspects of female social, cultural and economic life.

1.4.1 Female education

While the early stages of female education transition in developing countries are often characterised by an initial increase in fertility, effected through improved maternal and child survival and decreased breast-feeding duration (Jejeebhoy 1995:78; Risal & Shrestha 1989:37; Cleland & Rodriguez 1988), there is also an associated increase in use of contraception (Ainsworth, Beegle & Nyamete 1996:110; Castro Martin 1995; Cochrane 1979). In the longer term, however, demographic research positively links education uptake with delayed marriage and first pregnancy (Mensch & Lloyd 1997; Jejeebhoy 1995:167; UN 1995:83). Indeed, data generated by the World Fertility Survey (WFS) indicate that female education is strongly associated with fertility decline in developing countries (Findlay & Findlay 1991:27). In Nepal, improving education is associated with both higher age at marriage (Karki 1998:185) and increased contraceptive demand and use (Aryal 1998:89; Acharaya 1998:104; Subedi 1996:48; NFHS[6] 1996), although the relationship has been weak due to the early stage of female education (Niraula 1994; NFHS 1991).

[6] Nepal Family Health Survey.

Although doubt has been expressed that poor quality schooling in developing countries can have a direct effect on health (Cleland 1990), there is growing evidence that education of females is a key feature of development that has a negative effect on morbidity, mortality and fertility (Sen 1997:10; LeVine *et al.* 1994; Mason 1993:39). This is reflected in Nepalese data, which suggest a negative association between maternal education and infant mortality and fertility (Niraula & Lawati 1998:169; Aryal 1998:89; Chhetry 1996; Gubhaju *et al.* 1987[7]), and a positive association with health-promoting practices and indices[8,9] (NFHS 1996). However, the precise causal mechanisms of the action of female education on child health and fertility have not been identified. Considering female schooling and literacy to be the basis of health transition and child survival in developing countries, Preston (1989) argues that literacy skills developed through schooling are retained by girls to motherhood. This, he proposes, impacts positively on health-related practices through increased ability to perceive health information and relate to health providers, with the end result of increasing child survival. Increasing fertility limitation among literate couples in northern Bihar[10] is attributed both to greater understanding of contraceptive methods and discussion of family limitation between spouses (Blaikie 1975:45-47). Indeed, there is increasing evidence to suggest the educational status of communities is the most influential factor in the success of family planning programming in rural south India (Caldwell *et al.* 1988:161). This is further supported by retrospective research into fertility decline in industrialised nations, which indicates mass education to be a major factor in adoption of family planning (Caldwell 1980). Even among poor communities of modern LICs, female education is associated with increased awareness and utilisation of health services (Gulati 1984; Nag 1983).

Ainsworth *et al.* (1996:86-87) propose four principal routes through which female education influences fertility decline. These are: (1) improved use and efficacy of contraception; (2)

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[7] Gubhaju *et al.* (1987) using data from the Nepal Fertility Survey of 1976, illustrated that both infant and child mortality declined where one or both parents had received some education. These indices showed dramatic improvement in health of infants and children whose mothers had received 'some' education (IMR 91 per 1000) rather than 'none' (IMR 143 per 1000). As the majority of women who received 'some' education would have been rural poor, their educational experience will have been primary schooling. Viewed in this context, the value of even minimal education is evident by the dramatic positive effect on child survival at the population level.

[9] Abortion, illegal in Nepal, is much lower among women who have attended school than those who have not. It can be surmised that women with some schooling have less of an unmet need than those with none. As abortion in Nepal is particularly hazardous, this has implications for maternal well-being. (Thapa, Thapa, & Shrestha 1994).

[10] This Indian state borders Nepal.

decreased child mortality and increased confidence in child survival leading to a decline in the desired number of children; (3) the wage-earning effect of education delaying entry into marriage and childbirth, whilst raising the economic cost of children, thereby reducing desirability of large families; and (4) educated mothers becoming more likely to invest in their own children's education and professional lives, which, it is posited, renders smaller, better-educated families increasingly desirable. Levine *et al.* (1994) found that Nepalese mothers who had attended school retained their literacy skills and that this was positively associated with internalising novel health information. This, the authors suggest, supports and in part explains Preston's model of demographic and health transition. Indeed, where education *per se* is not accepted as a key factor in fertility transition in developing countries, it is accepted as an indirect determinant, in that education engages parental ambition for their children (Cleland *et al.* 1994).

1.4.2 The nature of female employment

Female employment, its relationship to development and association with fertility in developing countries, has generated diverse opinion based on widely differing indications from both within and between country settings. In both industrialised and LIC settings, where data[11] indicate a convincing association between these variables, a causal relationship often eludes detection or satisfactory explanation (Cleland, Phillips, Amin & Kamal 1994:69; Bernhardt 1993:94). Indeed, the literature provides no consistent indication of the nature of the association between women's work and fertility (Mason 1993:30; Findlay & Findlay 1987:27). What emerges, however, as an important influence upon development indices, including fertility decline, is female empowerment and status in society, two central aspects of which are education and employment.

It has been suggested that economic activity and interests outside the household may act to decrease the central importance of children to women's lives in terms of emotional needs and future security (Julémont 1993:115; Ahmad 1991:102, 117). Income generation is reported to raise female status in some settings in developing countries (Bernhardt 1993:80; Ahmad 1991:31). In Nepal, female employment outside the family is associated with increased female independence from the wider family and a decreased imperative for manpower and future

[11] It should be noted that censuses and country-wide surveys in many LICs are prone to under-record women's labour and productive contributions (for example, Cleland *et al.* 1994:76; Ware, 1993:273; Kundu & Premi 1992:43; Afzal 1992:43) including Nepal (Acharaya 1995:153; Singh 1990:80).

security provided by offspring[12] (Niraula & Lawati 1998:168; Mellander & Jönsson 1993:15; Chapagain & Shrestha 1989:151). The shift towards activities independent of the wider family, together with development in other areas of social organisation, especially education, is associated with female autonomy (Sen 1997:10) and behaviour linked to declining fertility in Nepal (Acharaya 1995:151; Tuladhar 1993:176,182; Axinn 1992a; Fricke, Thornton & Dahal 1990:288) and elsewhere (Thornton, Chang & Sun 1984).

In more egalitarian societies where women maintain control over their earnings, and those in which parents benefit from cash generation of unmarried daughters, age at marriage tends to increase with female employment (Jejeebhoy 1995:71; Goode 1984), which reduces a woman's lifetime fertility potential. Women engaged in professional, clerical and administrative positions, on average marry three years later than subsistence agriculturists, and even the lowest wage earners marry an average of one year later (Risal & Shrestha 1989:53). Furthermore, there are indications that in some developing countries, educated women deliberately decide to maximise their pre-marital income generation potential and delay marriage (LeVine, Uribe, Medardo, Correa & Miller 1991). Women's economic independence after marriage is also positively associated with child welfare and survival (Mason 1993:25,30; Dyson & Moore 1983:41), which apart from being a positive end in itself, lays the foundations for parental confidence in child survival, reducing the need for the security of high parity. The uncertainty of child survival in poorly resourced societies, such as those in Nepal, is regarded to be a strong support of high fertility (Mellander & Jönsson 1993:11; Shrestha & Shrestha 1991:34).

Changes from the household mode of production and family-centred life are grounded in the literature concerning social and demographic transition and fertility decline theory. Assessment of demographic transition in Europe (Notestine 1953) and modern LICs (Caldwell, Reddy & Caldwell 1988: 54) highlights the importance of social and productive

[12] Motivation for women engaging in wage labour and the social consequences of their doing so vary widely between the many ethnic, caste and religious groups of Nepal (Acharaya 1995:153,157). Among the higher caste Hindu groups, female labour outside the home may reduce the status of the household and is only resorted to in time of extreme poverty and crisis (Basnet 1992; Thacker 1993; Acharaya & Bennett 1981:45). High status work, however, is deemed suitable by some high caste families of high socio-economic status, where the post is seen to enhance the woman's status and that of her family. Positions in government, foreign banks and development agencies have become increasingly sought after for educated women from such backgrounds. For many hill peoples, female participation in external economic activities reflects the more egalitarian nature of their culture and women's freedom of movement as much as the economic need to seek such work. The Nyeshangte of north-west Nepal according to Watkins (1996:74) view the economic activities of women as symbolic of their personal empowerment and financial clout.

'decentralisation'. According to Notestine (1953:16), European fertility decline pivoted on the movement of younger people outside the family sphere of influence, most importantly in peasant societies where production was family based. The family, forming the centre of production, perpetuated social and economic control by older generations, who imposed and maintained traditional behavioural norms. For several decades, wage labour has been regarded as a factor of major importance in increasing autonomy of young people. This is understood to influence relaxation in adherence to traditional, pro-natal pressures, emanating from the community and maintained by senior family members.

It has been argued that in some LICs, as production becomes decentralised from the family, so too does the requirement for renewed family-sourced labour and senior family pressure on young members to reproduce manpower (Lesthaeghe & Wilson 1986). Field-based research by Caldwell *et al.* indicates that the post-Independence emphasis on economic growth in India released young people from family-transmitted social norms by providing opportunities for wage labour (1988:55). Although the expansion was mostly in male labour opportunities, it acted to decrease parental control and increase the autonomy of young people.

In family-based subsistence societies, women are often placed in a dependent role and can only gain security in the event of widowhood and old age and elevate their status in the household, by producing male children (Mason 1993:31; Ahmad 1991:33). Women engaged in family-based agrarian production are often under additional pro-natal pressure from senior resident in-laws (Caldwell 1982:11, 57) who also have a vested interest in male descendants. This places young wives under pressure to validate their position in the household and fulfil their role of producing sons (Dahal 1992:3). Furthermore, Cain (1984:10, 1993:43) proposed that the desired composition of families, in less economically developed settings, is shaped by long term security objectives. His 'safety-first' model is based on the premise that parents aim towards a minimum completed family size that ensures maintenance of the household above an unacceptable future standard of living. Indeed in Nepal, many parents are reported to define old age security in terms of a given number of surviving children (Mellander & Jönsson 1993:10). In the more urbanised and industrially developed Indian settings, however, there is decreased family dependence on male offspring for future security (Vlassoff 1990).

While there is no single causal link between female employment and fertility decline, it is apparent that certain influential factors are interdependent: a woman's ability to take up employment opportunities outside the household arena is related to her level of autonomy and

freedom of movement. In many LICs fertility is strongly associated with female autonomy, which is in itself closely linked to women's participation in the wider economy. A woman's employability may also depend upon her education (Fricke, Thornton & Dahal 1990:301) and her education may depend upon the labour market's potential for her to generate a livelihood (Mensch & Lloyd 1997). Similarly, a woman's fertility may affect her working options (Acharaya & Bennett 1981:45) as much as her employment opportunities affect her fertility (Findlay & Findlay 1987:27). Children are just one of many variables that can motivate women to seek work or render them unable to take up employment outside the home. As many of these factors are highly variable within and between LICs, it is understandable that no single trend or relationship is apparent between female employment and fertility.

1.4.3 Exposure to urban life and mass media

Communication and the flow of people between urban centres and rural areas has remained a central theme in theory of social change relating to fertility decline (Dahal & Fricke 1998:69; Bongaarts & Watkins 1996:669; Caldwell *et al.* 1988:55; Caldwell & Caldwell 1976:349) and behavioural change relating to the uptake of family planning services and technologies (Dahal & Fricke 1998:64-66; INFRAS 1995:15; Lin & Hingson 1974:190). This is pertinent to Nepal, where increasing exposure of young people to urban and foreign influences is linked to increasing experience outside the family and greater autonomy in decision-making and personal conduct (Fricke and Dahal 1998:69; Watkins 1996:254; Axinn 1992a:518). These factors are associated with a shift away from traditional values, increasing consumerism and broadening aspirations (Leichty 1997:33; Aryal 1996:89; UNFPA 1996:43-44; Hayes 1993:102). Road access plays a crucial role in facilitating communication and migration flows between urban and rural areas.

Many aspects of urban life are regarded as directly and indirectly influencing social change and fertility decline in LICs. The higher cost of living and opportunity costs of children in cities (UNFPA 1996:44; Schuler & Goldstein 1985:4; Notestine 1953:16) are associated with decreased demand for children and family-generated labour (Bongaarts & Watkins 1996:665; Hayes 93:92). Together with improved child survival, (Tuladhar 1989b:221; Gubhaju 1987:152), and more effective access to contraception, these factors are associated with increased fertility limitation (NFHS 1996:16; Tuladhar 1989:224; Caldwell & Caldwell 1976:364). Greater female education in urban areas (Niraula & Lawati 1998:163; Aryal 1996:89; LeVine *et al.* 1994; Mason 1993:3; Stromquist 1989:140-9; Tuladhar 1989b: 227) also broadens employment options (Axinn 1992a: 505), which in turn, influence increased age

at marriage (Acharaya 1998:106; Shrestha 1998:135; Acharaya 1993:78; Caldwell *et al.* 1988:97).

With only 9.2% of the population living in towns and cities, Nepal is one of the least urbanised countries of the world[13] (UNDP 1998:173; CBS 1995:41), yet it presents one of the highest urbanisation rates in Asia,[14] of 5.9% per annum in the decade preceding 1991 (CBS 1995:249). Like many other LICs, urban areas are more developed and sophisticated in Nepal, where the country's economic, government, health and family planning infrastructure are concentrated. Census and research data highlight urban-rural disparities in key socio-economic and development indices such as education,[15] employment in non-agricultural sectors (CBS 1995:284), and health facilities (NFHS 1996:16). These are reflected in the lower urban total fertility rate[16] and higher uptake of family planning services (NFHS 1996:10). Wealthy, educated and cosmopolitan echelons of society tend to cluster around the capital, where they lead a shift in values and fertility limiting behaviour that becomes more pronounced in comparison to rural areas (Aryal 1998:86).

Growing media networks rapidly transmit information, images and ideas across continents and cultures and are taking on increasing importance in shaping impressions of the outside world and alternative ways of living. Mass media introduce new concepts and aspirations both directly and indirectly (Bongaarts & Watkins 1996:660). This has proved a powerful tool, used by health, development and family planning agencies in LICs, for information dissemination and effecting behavioural change (UNFPA 1996:43-44; NFHS 1996:8; Aryal 1996:89-91; UN 1994:23; UNICEF 1992:175). Equally, commercial media stimulate aspirations and introduce media-dictated values concerning the nature of society and family that influence social change (Watkins 1996:254; Caldwell *et al.* 1988:55).

1.4.4 Female autonomy

Since the World Conference on Population in Bucharest in 1974, the growing interest surrounding the relationship between female empowerment and fertility decline in developing countries has stimulated micro-level research. Lack of female social power has come to be

[13] Compared with the percentage of populations in other Asian countries residing in urban areas in 1990: Bangladesh 16.4%, Pakistan 32%, India 27%, world population 45.2% (CBS 1995:247).

[14] Elsewhere the average annual urbanisation rate is reported as 7.3% per annum (Ertur 1994:19; Pudasaini 1993;65) and 6.6% (UNDP 1996:173). I have quoted percentage annual growth rate for the inter-census period 1981-1991, calculated from the complete 1991 national census published in 1995 (CBS 1995:249).

[15] According to the 1991 census, literacy in urban areas was 66.9% and 36.8% in rural areas (CBS 1995:282).

[16] In 1991 the TFR was 5.8 among the rural and 3.5 in the urban population (CBS 1995:74).

associated with high fertility in LICs and family planning programming efficacy is increasingly viewed as dependent upon the empowerment of women (UN 1994:23), although some researchers do not regard female autonomy as a prerequisite of fertility decline (Sathar & Casterline 1998:790). From the late 1980s, however, there has been a growing argument that fertility decline should be approached by first addressing female autonomy as a central objective (Sen 1992; Lappé and Schurman 1988) and that female empowerment should be regarded as a development goal in itself.

While the importance of female autonomy as a factor in the development process and fertility decline has been acknowledged by major international agencies (World Bank 1984), its incorporation into family planning policy has been slow (UNFPA 1989). The global failure to develop female empowerment as a tool in fertility decline is similarly reflected in Nepalese family planning policy and programming (Dahal 1996:147).

The association between female autonomy and behaviours supporting and influencing fertility decline has been reported across cultural settings in LICs (Jejeebhoy 1995; Hall 1991:18; Mason 1984; Dyson & Moore 1983). In Nepal, research has shown the empowerment of women to be similarly associated with demographic behaviour, the desirability of children and demand for family planning (Niraula & Lawati 1998:170; Morgan & Niraula 1995:541, 558; Acharaya 1995:159). The mechanisms by which female autonomy influences fertility decline are not clearly determined and remain largely theoretical. In her extensive review of research into female education, autonomy and reproductive behaviour in LICs, Jejeebhoy (1995:8) suggests five key factors: (1) access to knowledge through education and breadth of experience; (2) autonomy in personal and family decision-making; (3) freedom of movement; (4) emotional autonomy allowing the formation of personal bonds and intimacy between partners; and (5) economic self-reliance and social independence. It is through these pathways, Jejeebhoy suggests, that women gain information and confidence and by acting within wider spheres, they are able to control resources, rise to new opportunities, be self-determining and take a central role in decision-making concerning their children and intimates.

Wider research has shown that more autonomous women are more likely to form close bonds with their husbands, enabling the discussion of family planning, leading to the use of contraception (Jejeebhoy 1995:48). At the same time as conjugal intimacy is developed, the influence of senior kin in propagating traditional pronatalism is reduced. Women who have a high level of empowerment and participation in household decision-making processes are more

able to make decisions concerning their personal fertility, and have the confidence and freedom to approach family planning services that leads to fertility limitation (Niraula and Lawati 1998:165; Cleland, Kamal & Sloggett 1994). Furthermore, women whose autonomy within their community and household allows them freedom of movement, are more able to gain access to health facilities, which both increases child survival and contraceptive use (Cleland 1998:211).

Female economic independence, such as that gained via participation in female-centred development projects (for example, the *Small Farmers Development Programme and Production Credit for Rural Women,* discussed in section 2.5.2.2) or from independent income generation or property ownership, is understood to strongly influence adoption of contraceptive practice in Nepal (Niraula & Lawati 1998: 170; Axinn 1992a: 514). This is linked to the assertion that economically autonomous women are less dependent upon the financial support of offspring in old age, and that son preference is observed to decline with increasing female financial independence in Asia (Mason 1993:31; Cain 1993:44; Ahmad 1991:117, 121). In Nepalese communities in which women have low economic autonomy and their security is dependent upon men, female status within the household is reported to be contingent upon their ability to bear sons (Stone 1978:9). Son preference, associated with male-dominated society and low female autonomy, is in turn understood to support high fertility in developing countries with high child mortality (Cleland *et al.* 1994:75). Furthermore, improved confidence in child survival, associated with decreased fertility, is found in more southern states of India, where cultures support higher female autonomy than in the north (Dyson & Moore 1983).

Age at marriage, a factor influencing the duration of women's fecund lives in which they risk pregnancy, is also associated with female autonomy in LICs (Cleland *et al.* 1994:75). Indeed, in some Nepalese societies in which there is a high level of female economic and domestic autonomy and freedom of travel, women report consciously delaying marriage and even elect to remain single in order to maintain their autonomous lifestyle (Watkins 1996:73).

Although under-researched, there are strong indications that road provision in rural areas of LICs has the potential to impact positively on female autonomy by promoting access and mobility, which enhance participation in wider social and economic pursuits. Throughout the developing world, the majority of rural transport is carried out by women (Edmonds 1998:13; Barwell 1996:ix; Doran 1996:7-8). Improving transport, therefore, has the potential to reduce

the female work burden (Malmberg Calvo 1994:28) and allow women greater economic involvement and productivity (Barwell 1996:28). Enhanced mobility, moreover, enables women to develop avenues of employment beyond the traditional home and farm (Acharaya 1995:65), which among some Tibeto-Burman groups in Nepal, is reported to enhance female empowerment (Watkins 1996:74). The powerful impact road provision, and most importantly the degree of mobility it affords women, has been noted by Fernando:

> Transport is an essential element in people' lives. It determines access to a range of essential resources and activities and influences the mobility of people and goods. Lack of access and restricted mobility leads to isolation. Isolation means poverty. (Fernando 1998:1)

A reduction in geographical isolation facilitated by improved transport and mobility improves women's opportunities and options for income generation and encourages entrepreneurial activities (Doran 1996:10-11). In south India, mass mobility enabled by project support of women cycling has been successful in markedly reducing the women's transport burden. The general increase in self-determinism and freedom of movement over greater distances has been credited with improving women's access to education and information, the combined effect of which has enhanced their confidence and self-esteem (Rao 1994:2-3). As I show in chapter 5, however, dynamics of Tamang life in Jetthul mediate women's use of motorised transport along the Lamosangu-Jiri road, which in turn, constrains their participation in the wider economy and traditionalises their productive role. This, I argue has the potential to reinforce gender power relations more common to the hegemonic Hindu culture, rather than the relative equity customary in Tamang life.

1.5 Thesis presentation

Having established the rationale and theoretical framework supporting my research, in chapter 2, I introduce the research community, the people and villages in Jetthul. To ground my findings in the national context, I briefly review the situation of aspects of female development that are considered in chapters 4-8. Chapter 3 sets out my approach to fieldwork, and the evolution of my study and research methods. Chapters 4 to 8 list specific research objectives and present my study findings. I also compare certain quantitative data from my own fieldwork with those obtained by Fricke and others (1991), using the same basic survey questionnaire, in two Tamang communities in differing socio-economic and geographical settings, with markedly differing road access. In each chapter I present a discussion and interpretation of my findings. Chapter 9 concludes the thesis with a discussion of ways in which construction of the Lamosangu-Jiri road has impacted upon the lives and fertility of Tamang women in Jetthul.

Chapter 2

The villages and communities in Jetthul and their national context

2.1 The country setting

Bordered by India to the south, east and west, and by Chinese-occupied Tibet to the north, modern Nepal is sandwiched between two major players in the Asian political arena. Unlike India, Nepal has never been colonised by foreign powers, and until 1951, it remained a closed country (UNICEF 1992:3). The kingdom's independent status in such a strategic position has attracted considerable foreign interest and development assistance in recent years (Bista 1991:133; Poudyal 1988:19). Nepal has, however, undergone internal struggle in recent decades. In the century preceding 1951, the Rana family governed Nepal, maharaja-style over the heads of the incumbent monarchs until overthrown by King Tribhuvan. From 1951 until 1990, Nepal was ruled directly by Shah kings, ostensibly through a "Panchayat Democracy" (Whelpton 1997:47). A democratic multi-party system was only conceded by the current king following the democratic movement that culminated in mass protest in the spring of 1990 (Gellner 1997:166-7; US Department of the Army 1993).

Although Nepal is officially Hindu (CBS 1995:308), in reality it has gradients of religions ranging from Buddhism to various polytheistic, animist beliefs, all of which seem to blend and blur at the edges. This is apparent in the combination of symbolism and gods from both Hindu and Buddhist traditions that furnish many of Nepal's religious sites and which cause confusion among tourists. The kingdom comprises communities of diverse ethnicity, primarily originating from Indo-Aryan and Tibeto-Burman peoples. The 1991 Census recorded over 60 distinct ethnic and caste groups (CBS 1995:313), added to which are more recent refugee populations from Tibet (Pfaff-Czarnecka 1997:439) and Bhutan (Hutt 1997: 36) and transient Indian traders and settlers.

The topography of Nepal is such that less than 20% of the land surface lends itself to cultivation. Of Nepal's 147,181 square kilometres, 77% is mountainous (Shrestha 1988). Given that over 90% of the population are distributed in rural areas (CBS 1995:296), with a high degree of reliance upon subsistence agriculture, there is considerable pressure on cultivable land (Blaikie & Coppard 1998:37). The Himalayan range runs west-north-west to east-south-east, forming a natural border with Tibet. South of the Himalayas, running in parallel is the Mahabharat mountain range, which renders the central region of Nepal highly mountainous. Nepal's southern lowland area, an extension of India's Gangetic Plain, known as the Terai,[1] is bisected by the Siwalik Hill range running parallel to the mountain ranges. Although the climate of Nepal is listed in many texts as "sub-tropical monsoon" (Shrestha 1988), the extreme altitudinal range effectively creates micro-climates, ranging from high altitude desert,[2] through alpine-type temperature and vegetation in many of the hill areas, to the tropical climate of the Terai.

Plate 2.1: The Himalayan mountain range viewed from Jetthul.

Nepal is one of the world's poorest countries, with a GNP per capita of US $170 (UNICEF 1995: 76-77).[3] As Nepal's Human Development Index ranks very low[4] (UNDP 1998:21) and the kingdom has attracted substantial foreign aid[5] in the last four decades, it is an excellent setting in which to observe the effects of economic development.

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[1] This term is sometimes directly transliterated from the devanagari as 'Tarai'.

[2] Such as in Mustang, Dolpa and Manang Districts in the north-west.

[3] For comparison with the GNP per capita of other Asian countries: $310 in India, $540 in Sri Lanka, and $1,840 in Thailand.

[4] Nepal ranks 152nd out of 174 counties listed by the UNDP Human Development Report (1998:21).

[5] For example, Nepal received approximately US $467 millions bilateral aid from the British goverment alone in 1992 (UNICEF 1995:76).

2.2 Jetthul as the location of field research

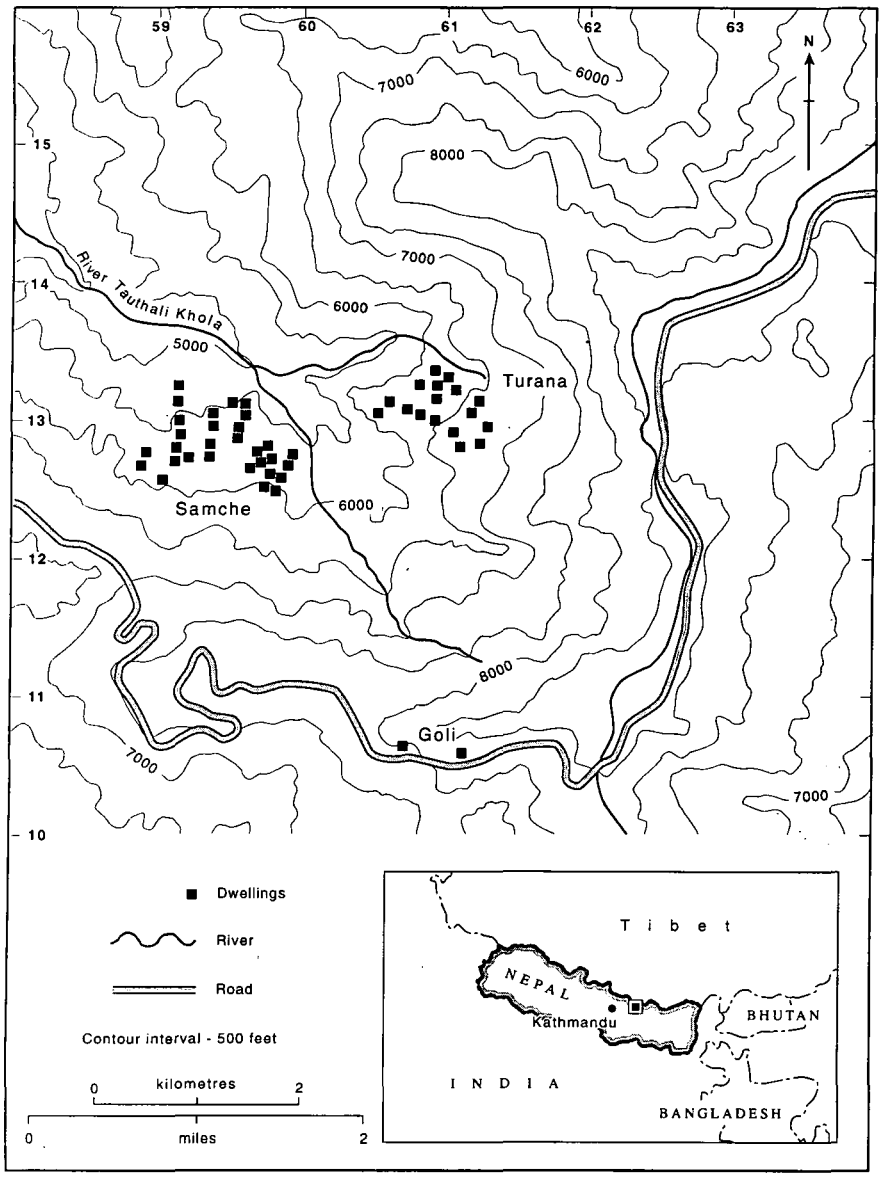

Figure 2.1: Map of Jetthul.

Figure 2.1 illustrates the location of the Tamang community upon which this study focuses. The two rural settlements of Turana and Samche[6] are situated within Jetthul Village Development Committee, in Sindhupalchowk District. This area lies within the Central Development Region, north-east of the Kathmandu Valley, in the foothills of the Himalayan mountain range, approximately 30 kilometres, as the crow flies, from the Tibetan border. The villages are situated between 1,600 and 2,000 metres altitude along the southern watershed of the Tauthali Khola, a tributary of the Bhote Kosi River.

[6] For simplicity, I mostly refer to the two communities collectively as 'Jetthul'.

Plate 2.2: The villages of Samche (in the foreground) and Turana (to the right).

Until the Lamosangu-Jiri road became motorable in the late 1970s, the only method of transport in the north-east of the country was by foot, which rendered Turana and Samche many days journey from urban centres. Apart from rare ceremonial events, such as the wedding of the head of the village, animals are not used for transport in this area of Nepal. Even though the Tamang were originally horse-traders, the scarcity of fodder and time burden of grazing animals has rendered them obsolete. Construction of the Lamosangu-Jiri road (shown in figure 1.1), which later provided a fully motorised link between the population of this study and local market towns, Kathmandu, the Tibetan border and India,[7] commenced with earthworks in 1974. Although the section of road from Lamosangu to the Jetthul roadhead at Goli was not fully motorable to buses until 1980, 4-wheel drive vehicles began travelling this route from late 1978. Effectively a road link of sorts between Jetthul and Kathmandu began then. Subsequently the road was surfaced with bitumen, making it an all-weather routeway. It was not until 1980 that the local section of road was fully opened to motorised[8] vehicles. The entire road as far as Jiri was completed five years later in 1985 (INFRAS 1995a:2).

In the present day, the road journey to Kathmandu takes approximately five hours, preceded by a 1.5 - 2 hour[9] climb up a steep slope to the roadhead at Goli, where approximately 18 buses and 15 lorries pass each day (INFRAS 1991b:15). In 1991 the cost of travel to Kathmandu by

[7] Connections between the Lamosangu-Jiri road and the national roads network is set out in chapter 1.
[8] Data source: Personal communication with H.P.Maag of SDC (25.7.96).
[9] The journey time up the hillside to the roadhead at Goli depends upon the conditions of the trail, which deteriorate in the monsoon, increasing walking time.

bus was NR 50 each way (equivalent to approximately 75 pence sterling). The return fare was equivalent to the pay for almost two weeks' agricultural labour.

The effective increase in the proximity of the study area to urban influences has opened many opportunities for the community. The nature of movement has changed from predominantly foot traffic and human portering of goods to motorised transport and haulage. Mobility has consequentially increased from 130 people per day passing through Goli[10] in 1971, to 1,400 per day in 1989 (INFRAS 1991b:16). This has not only had the effect of channelling traffic from many small tracks through one metalled route, but has increased individual mobility. Traffic surveys show that approximately 0.5 million individuals travel along the Lamosangu-Jiri road to and from Sindhupalchowk District annually (INFRAS 1991b:15). The age and gender of travellers has not, however, been quantified. In chapter 5, therefore, I quantify the extent to which Jetthul women are road users and review patterns of travel through their lifecourse.

Plate 2.3: The condition of the trail to the roadhead after the monsoon

Plate 2.4: The roadhead at Goli.

Given the close proximity of the two villages to the road (by local terms of reference), Jetthul provided a suitable setting in which to investigate the road's impact upon women's lives and reproductive behaviour. With this dissertation in mind, the villages of Samche and Turana presented a good research community because:

- village elders were in agreement that the project was worthwhile and encouraged community participation;

[10] Passing in both directions.

- experience had shown that the community was adjusting to political change of the democratic movement of 1990 in a non-violent manner, unlike some villages in the area;[11]
- the two villages were situated in close proximity and mainly comprised residents of the Tamang ethnic group. This simplified the logistics of surveying and ethnographic observation;
- the Tamang, as one of Nepal's larger ethnic groups, are representative of Nepal's hill communities;
- the inhabitants were traditionally self-sufficient subsistence farmers;
- villages were not in close proximity to tourist or trekking routes and had very low contact with westerners;
- prior to 1978 the area was remote (several days journey) from urban centres;
- the road, constructed within two hours walk of the villages, rapidly increased the potential mobility of the community and effectively created a link with wider economic and development opportunities;
- Jetthul, while rural, within the national context, has had good access to Kathmandu since 1980;
- the economy was representative of the transition many rural Nepalese communities were undergoing. Although highly reliant upon traditional subsistence farming, cash had become increasingly important and families had begun to diversify in their income-generating activities;
- Jetthul did not fall within the catchment area of any substantial ongoing development projects, apart from long-term country-wide programmes;
- traditional ways of life were labour intensive. Animals were not employed for transport or load carrying, largely due to the shortage of fodder. All travel, prior to the advent of the road was on foot. Subsistence agriculture was traditional and involved low technology.

2.3 The villages and Tamang communities

2.3.1 Demographic profile

Turana village comprises 30 households that are exclusively Tamang. Dwellings range from 1,800 to 2,000 metres altitude along a north-west facing slope. Four clans: Mokdon, Gyaba, Lokar and Yonjon are represented in Turana and the total population in October 1991 was 162, with a mean household size of 5.4 members. Samche's dwellings on the north-facing slope of the hill range from 1,600 to 1,800 metres altitude. The 35 households are mostly Tamang, of Mokdon, Gyaba, Lokar and Bal clans. Nine families of the higher caste Chetri ethnic group and one young Kami blacksmith family also reside in Samche, where the average number of

[11] The response of communities in the area to political change accompanying the democratic movement of 1990 is discussed in Chapter 3, section 3.2.

people per Tamang household was 6.1 at the time of my formal survey in October 1991. As the villages of Turana and Samche have not previously been surveyed, quantitative data concerning permanent out-migration are not available for comparison with my own. As I show in chapter 4, none of the households had relocated to the roadhead and while there had been some permanent out-migration from the area during the production crisis of the 1960s (INFRAS 1995:10), there were no reports of subsequent departures.

clan	Turana	Samche	total number	percent
Mokdon	26	16	42	13
Gyaba	6	125	131	44
Lokar	120	8	128	41
Yonjon	10	0	10	3
Bal	0	3	3	1
total	**162**	**152**	**314**	

Table 2.1: Clan composition of the Tamang population of Turana and Samche in 1991.

Although there is wide variation in the proportion of each clan represented in the two settlements, the majority of the sample population are affiliated to the Gyaba and Lokar clans. Tamang residence in Jetthul is organised through clans that are traced through the male line, and village residence is patrilocal. Women in the Jetthul communities are permitted to marry within the same village, in common with Tamang elsewhere in Nepal, but marriage between members of the same clan is regarded as incest and prohibited (Campbell 1997:207).

2.3.2 Jetthul households

Households in Jetthul typically comprise a man, his wife, their unmarried daughters and sons, and married sons, their wives and offspring. Some years after marriage, couples often set up their own homes. Widowed parents usually live with their married sons in old age. House design is variable, but follows the basic Tamang scheme set out by Wiart (1983). Most homes comprise two storeys, although some in Jetthul have three, and are constructed using locally quarried stone, fixed with cement made from mud and cow dung. The upper floor is used mainly for storage of grain and the lower floor, housing the hearth, is used for cooking and communal sleeping. Guests are received in a porch area and the family carry out home-based tasks in the sun, either on an upper storey veranda, or on a levelled area in front of the dwelling. The ground floor is made of compacted mud, which is regularly resurfaced using a mixture of red mud, and cow dung called *lipnu*. The interior is quite dark, as windows are small, unglazed and closed by shutters. Chimneys are not incorporated into Tamang domestic architecture in Jetthul and the atmosphere of house interiors is smoky, as the only exit for

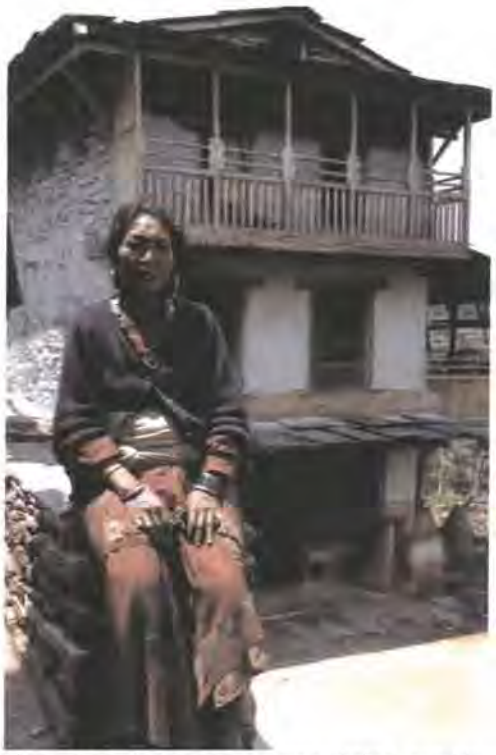

Plate 2.5: A Tamang woman sitting outside her house in Samche.

fumes from the fire is through the roof. Roofing materials vary depending upon the wealth of the household. Poorer families use leaves or rice stalks as thatch or wood shingle. Some wealthier households use metal cooking oil cans that have been beaten flat and the richest dwellings have slate or corrugated iron roofs.

All the Tamang in Jetthul are primarily subsistence agro-pastoralists, although livestock and landholdings vary. While some households are better off than others in terms of their farming and labour resources, very few meet their consumption requirements each year. As I show in chapter 4, for most households this necessitates one or more of the men migrating for waged labour both seasonally and for extended periods of time. While some families have greater food and economic security than others, the Tamang of Samche and Turana are generally impoverished. While some individuals are able to make occasional personal loans to others, none of the families are merchants or own shops or tea houses.

2.3.3 The villagers

Like Tamang elsewhere in Nepal, religion in Jetthul is a mixture of Buddhist and shamanic practice and incorporates the celebration of some Hindu rituals and festivals (Holmberg 1989:6-7; Panter-Brick 1987:20). The Tamang inhabitants of Jetthul are proud and handsome people. Women wear their long, dark hair parted in the middle, secured in a plait down their backs. Piercing through the septum and left side of the nose, and through the lobes and other parts of the ear, display gold ornaments. Married women also wear *pote*, beaded necklaces made from Tibetan 'coral' or glass beads and necklaces made from silver coins. Cotton *loongis*, and more recently nylon saris, are wound around the lower body in the style of a sarong and a *cholo* (blouse) covers the top and arms. Several metres of cotton fabric are wound tightly around the waist to form a kind of girdle called a *ke*[T]. Items such as popped corn and small amounts of cash are placed in its folds that serve as pockets. Women say that *ke* support their backs when they carry heavy loads and are beneficial to the health following childbirth. In colder weather, women wear woollen shawls or Chinese factory-made

cardigans purchased from shops in Lamosangu and Kathmandu. Some women wear cloth tied around their heads in a kind of turban, while others leave their heads uncovered. Women mostly walk barefoot or wear rubber thongs called *chappal*. Male dress is a combination of western-style jackets, Nepalese shirts and trousers or shorts. Some men wear traditional turbans, although the majority wear Nepali cloth hats called *topi*. Children mostly wear manufactured, western style clothing and run around bare foot.

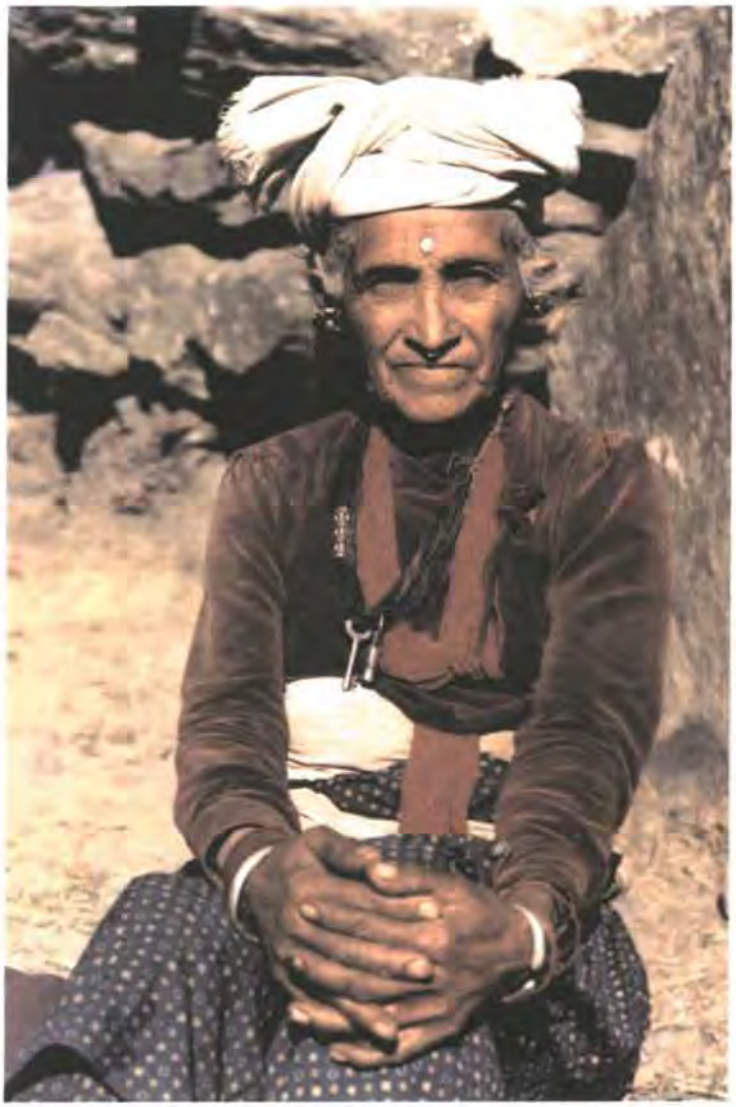

Plate 2.6: A Tamang woman from Turana.

Health is generally poor among the villagers. Widespread tobacco smoking, combined with the smoky house interiors, precipitate chronic respiratory disorders. Although the quality of drinking water is good, the monsoon inevitably heralds a season of diarrhoeal disease, when worms are rife and many children exhibit gross abdominal swelling. Impetigo, a highly infectious bacterial infection of the skin around the mouth, is common among infants and small children, whose faces become encrusted in weeping sores. Some lactating mothers also develop lesions on their breasts from feeding infected infants. Almost all children are infested with head lice and in some cases, this leads to the development of infected scalp sores.

Nutritional disorders are not uncommon and most children are thin. Some children exhibit signs of rickets and extreme protein energy malnutrition is visible in occasional distressing cases of marasmus and kwashiorkor. My neighbour, Hom Bahadur Tamang, the village *jhankri*

(shamanic healer) addresses illness through a spiritual medium, often employing the sacrifice of chicks and chickens, in an endeavour to exorcise ghosts and appease the angry spirits causing ill-health.

Plate 2.7: A young girl exhibiting signs of intestinal worm infestation.

Plate 2.8: A small boy with impetigo.

2.3.4 Village amenities

Modern health facilities in the area are very poor. Jetthul VDC has no Village Health Worker or Traditional Birth Attendant. The nearest modern medical assistance of any kind is the government Health Post at Dandarpakhar, 12 km west along the Lamosangu-Jiri road, and the nearest doctor is 30 km north-west along the Arniko Highway at Barabise (shown in figure 1.1). One of the most difficult aspects of fieldwork was seeing minor injuries and infections develop into serious medical conditions, through lack of information and basic health care. Infants occasionally died from withdrawal of food and liquid during bouts of diarrhoea; a small girl became deaf following an untreated ear infection and an infected wound caused a young boy to develop a withered hand.

Both villages have a supply of clean water. Natural spring water is distributed to public points

Plate 2.9: Washing clothes at a water pipe.

by robust plastic piping that was installed in 1988 as part of the wider IHDP/Lamosangu-Jiri road project (discussed in chapter 1) in co-operation with UNICEF. As I show in chapter 4, water still has to be carried up and down steep gradients, usually by girls and women. As household water haulage involves a substantial time and energy cost, washing of food utensils, clothes and bodies usually takes place at the end of the free-flow pipes. In such a public arena, personal cleanliness is difficult to achieve. This together with the extreme cold of the water does not encourage washing. Apart from the face and hands, I rarely observed Tamang adults washing, unlike Chetri women who wrapped themselves in *loongis* and managed to wash whilst retaining their modesty.

Apart from a recently built pit latrine at the school in Samche,[12] neither village has any structures for the disposal of sewage or waste. Adults defecate in the fields and urinate at the back of houses and children excrete in and around the home. Faeces also litter paths and tracks between villages. Edible refuse is fed to domestic animals. All other 'waste' products tend to be recycled, for example cooking oil cans are re-used as roofing material, but broken items and torn plastic wrappings are simply abandoned.

Turana and Samche became electrified in 1990, the installation of electricity in the area having been accelerated by the road, which the power lines follow (INFRAS 1988:101). The few houses that can afford a supply use electricity solely for light. All households use wood for cooking and heating, and kerosene lamps and lanterns are the most common forms of lighting. There ware no shops in either of the two villages. The nearest supplier of essential occasional items such as cooking oil, sugar, cigarettes and kerosene is at Goli, the roadhead above the study villages.

Relations between the residents of Turana and Samche and their nearest neighbours in Newargoan are reasonably benign.[13] The chronic shortage of fuelwood, however, is an on-going

[12] Proximity of the study villages to the school is set out in chapter 6.
[13] As the name suggests, this village was mostly inhabited by Newar people.

source of friction between communities and on occasions this has led to disputes.

2.4 The Tamang in Nepalese society

2.4.1 Geographical distribution

As the mother tongue of over 900,000 people, Tamang is the primary language of just fewer than 5%[14] of the total population of Nepal (CBS 1995:302). It is, however, the most common of the Tibeto-Burman languages, indicating the Tamang to be one of the country's most substantial hill communities. Around 95% of Nepal's Tamang-speaking population live in rural areas (CBS 1995:307) with the majority settled in the hilly regions of the Central Development Region, outside the Kathmandu Valley. Smaller representations (under 3%) are found in all zones of the Western Development Regions. Sixteen percent of the Tamang-speaking population occupy the Eastern Development Region, in the Sagarmatha, Kosi and Mechi Zones (CBS 1987: 80-81).[15] Tamang settlements continue as far east as Darjeeling and West Bengal (Hutt 1997:114; Bista 1987:52: Macdonald 1975), where some are known as *Murmi* (Whelpton 1997:55), which Macdonald suggests may originate from the Tibetan *mur*, meaning "at the frontier" and *mi* meaning "man". While according to Gurung (1997:508) "The ethnonym *Tamang* can be interpreted as highlander (*ta* = up, high; *mang/mu* = people) ..."

2.4.2 Being Tamang

Ethnographic accounts present the peoples referred to as Tamang as a diverse and variable ethnic group. While observations of variability in language and ways of life are not unpredictable within a large and dispersed ethnic group, the historical context of inclusion in this 'ethnic' classification illustrates that the designation has arisen from a combination of political and individual expediency, as much as from social evolution.

While contemporary documentation testifies to the existence Tamang peoples in the upper Kali Gandaki in the seventeenth century (Ramble 1997:412), there is evidence of later official relabelling of groups of previously Bhotiya identification as Tamang. In the face of continued Tibetan claims to Nepalese territories, occupation of borderlands by Buddhist, Tibetan speaking peoples continued to be perceived as a security liability by the central Hindu state. The names *Bhotiya* and *Bhote* by which these groups were known, literally meaning "people from Tibet", lent weight to Tibetan claims to the lands these communities occupied. As Ramble comments:

[14] The exact number is 904,456 and percentage is 4.89.

[15] The most recent census does not record data on ethnic groups by geographical region. These figures are taken from the previous census.

> A Bhotiya is someone from Bhot, and Bhot not only denotes the Tibetanid areas of Nepal, but also the polity of Tibet. Relations between Nepal and Tibet were often far from amicable, and indeed at the time of the promulgation of the Muluki Ain in 1854 the two countries were about to embark upon a bloody two-year war. (1997:393)

Fürer-Haimendorf (1975:234) suggests relabelling of Bhotiya peoples with the Tamang name commenced during the administration of Jung Bahadur Rana, when codification of Nepalese *jats* was formalised by the *Muluki Ain* of 1854. This strategy aimed to "... re-legitimate the identity of Nepal and to motivate solidarity of her citizens ..." (Höfer 1979:40) and thereby consolidate the state. In so doing, it dictated that communities living close to the Tibetan border were no longer to be referred to as Bhotiya:

> The motivation for this policy decision was probably the wish to forestall any future claim of Tibet to border areas inhabited by Tibetan-speaking populations hitherto described as [sic] Bhotias, i.e. Tibetans. (Fürer-Haimendorf 1975:234)

Further use was made of the Tamang designation to envelop 'peripheral' communities following a government proclamation promulgated in 1932, when many of the remaining ethnic groups in this region still known as *Bhote* had the newly formalised *jat* label imposed upon them by government officials. As a consequence, an array of communities of previously distinct ethnic designations such as the Murmi and Lama became one according to Nepalese law. As Holmberg comments:

> The shift from the nineteenth-century Murmi to the twentieth-century Tamang reflects a transformation of the populations referred to by this term from the margins of Tibetan civilization to the margins of Nepalese civilization... (1989:17)

What appears to have determined inclusion of peoples in the Tamang appellation were sharp social, cultural and dietary dissimilarities with other Bhotiya groups and mainstream Nepalese society. Whereas the consumption of beef and carrion are anathema to other groups, meat obtained from these sources is eaten by many Tamang peoples. This aspect of Tamang life has continued to set them apart from other groups, who consider them to be dirty, wild, immoral and dangerous. Bahun and Buddhist friends in Kathmandu attempted on many occasions to dissuade me from my return to the field, expressing the fear that I would be murdered by Tamang villagers who they regarded to be drunken and known for their sexual promiscuity, "hot" tempers and "bad" ways.

In Jetthul, the Tamang slaughter buffaloes for meat and eat the flesh of cattle that die of other causes. Villagers would not slaughter cows, but ate their meat when they died from illness, injury or old age. This, in addition to their alcohol production and consumption and raising of

pigs sets them apart from their Chetri neighbours to such a degree that I was unwelcome in their homes as a result of my close association with the Tamang and their polluting ways.

By beef-eating therefore, Tibetan-speaking, proto-Tamang communities occupying marginal territory on the borders of Tibet, were deemed to violate not only the holiness of sacred animals, but also the prevailing Hindu order:

> The cow in Nepal played a very special role in the process of defining both Nepal's Hindu identity and the limits of centralized power. (Michaels 1997:81)

Even set in opposition to Hindu law by their beef-eating, legal codes of the nineteenth century pronounced all Bhotiya, including old and emerging Tamang, to be *chokho jat* (touchable, from whom water is acceptable) rather than *pane nachalne* (ritually unclean) like other beef-consuming *jats*. They were, however, ranked beneath other alcohol consuming (*matwali*), non-beef eating Tibeto-Burman hill peoples such as the Gurung, which set them apart as enslavable people (Holmberg 1989:26). From the emergence of the Tamang *jat*, therefore, peoples labelled in this way have been accorded the lowliest roles in Nepalese society. While enslavement of Tamang was officially abolished in the late 1920s, people included in this designation have traditionally occupied the lowest ranks of labourers, as Campbell remarks:

> ... the overall structure is one that only has a role for Tamangs as beasts of burden. The details may have changed but the Tamangs are still carrying loads to make profits for the Kathmandu elite. (1997:228)

Over the decades, academic reports concerning the degree of *jat* cohesion and self-recognition of Tamang identity has covered a range of possibilities. Early ethnographies by Lama (1959) and Höfer (1979:148) present the Tamang as a group sharing a notion of common ancestral origins. While more recent literature (Holmberg 1989:20-22; Fürer-Haimendorf 1975:134) highlights the contrived nature of the *jat* imposition and emphasises the perceived ethnic differences of the peoples classified in this way. Indeed, Holmberg asserts that the Tamang designation "does not... necessarily encompass groups of people who always share a self-identity or a set of empirically established cultural features" (1989:10).

While there is some variation in the ways of life of Nepalese peoples labelled "Tamang", there are features common to communities sharing this *jat* designation. Although a degree of linguistic disparity is apparent, the majority of Tamang share the same basic language. Indeed, the 1991 Census defines ethnicity according to an individual's mother tongue (CBS 1995:301-302), therefore the national Tamang community can be said to share the same basic first

language. Although certain features of life may not be perceived to be 'shared', they may be viewed by outsiders to be common to many Tamang communities. Preferential cross-cousin marriage is a salient feature of numerous Tamang ethnographies, together with similar social structure, ritual life and value systems (Campbell 1997; Holmberg 1989; Panter-Brick 1987; March 1979; Hall 1978).

In perceiving close social and linguistic similarities, anthropologists and other outsiders sometimes refer to communities as 'Tamang' when the people themselves identify with other ethnonyms and "... use of [the term Tamang] would in local terms be deemed incorrect" (Campbell 1997:206). In modern Nepal Tamang identity is clearly variable according to the standpoint of those by whom it is perceived: for example, western Tamang regard eastern Tamang to be "*Shar-pa*" (Holmberg 1989:20), and whereas the Ghale may be classified by outsiders as Tamang (Gurung 1997:508), they regard themselves to be separate from other Tamang and do not share their proclivity for eating beef (Campbell 1997:207).

While a given community might be labelled as Tamang by administrative officials, the same people might be referred to by the derogatory term *Bhote* by Indo-Aryan neighbours (Hepburn 1994:450), and the people in question may identity themselves as Yolmo, Lama, Tamang or even Sherpa. Clarke has been much quoted in his succinct summary of the situation encompassing Tamang identity: "... one group's Tamang is another group's Lama" (Clarke 1980:25).

Within the Jetthul community the Tamang ethnonym is theoretically problematic. Not all the women forming the focus of this study fulfilled all criteria posited for 'being Tamang'. Apart from a woman who was born and raised a Chetri, who called herself Tamang following an inter-*jat* marriage, two teenage girls, born and raised by Tamang parents, were unable to speak more that a few words of the mother tongue. In this way, the girls do not meet the criteria of the National Census for being Tamang. For my own research identification classification purposes, my point of reference was derived from individuals themselves. At the very beginning of my field research, when taking a census of all households and their members, I asked villagers their name and *jat*. All women included in the study presented in this thesis identified themselves to me as belong to the Tamang *jat*, which they also use as their name (for example, Pema Tamang).

Clan affiliation, for Tamang who have experienced political intervention in their ethnic

identity, is central to their heritage and self-identity. The importance of clan identity is apparent in Tamang behaviour surrounding sexual contact. In Jetthul, sex with and marriage to a partner with the same clan name, regardless of whether or not they are identified as Tamang, is regarded as incest and is strictly forbidden. When young people mix with strangers at *mela* (dances), an important aspect of courtship is the establishment of clan affiliations of potential sexual partners, which are explored through song. This provides a highly charged and erotic form of flirtation, which ensures the absence of mutual clan ties prior to sexual engagement. The importance of clan as a unifier among the Tamang with an arguably weak *jat* identity is further illustrated by Campbell's account of the relative importance accorded to *jat* and clan by Tamang in Rasuwa:

> Eastern Tamangs [are] lumped together as untrustworthy Purbal ('Easterners'), unless their clan identities become known and translated into the local context of kin and affines. This process can even transcend 'ethnic' categories; a Sherpa road engineer from Solu-Khumbu of Shangten clan came to be accepted in the village as a clan brother of the Tamang Shyangba (1997:230).

In more recent years, however, there is evidence of a growing sense of shared Tamang identity. Holmberg asserts that due to increased mobility and contact of peoples sharing the same clans "... a pan-Nepal Tamang identity is beginning to be more fully asserted." (1989:21), while Whelpton considers the role of the *Nepal Tamang Ghedun* (Tamang Council) in promoting a new sense of group identity and culture (1997:56).

The "elasticity of group boundaries" (Whelpton 1997:52) in Nepal, employed strategically by marginalised communities to proactively redefine themselves, is also used by some Tamang to meet their needs in different contexts. Many Tamang regard their *jat* designation as a flexible state of identification and it is not uncommon for them to re-label themselves. Young Tamang men are increasingly deploying the strategy of adopting the *jat* and reputation of other ethnicities to gain access to profitable employment opportunities. Often overlooked by foreign and domestic army recruiters, Tamang men are known to present themselves as Gurung (Whelpton 1997:55), a *jat* which has been traditionally favoured for military service. The fame and reputation of Sherpas is also 'borrowed' by enterprising young Tamang men, who assume Sherpa identity to benefit from tourists' preference for an ethnic association with noble portering and trekking guidance (Stevens 1993:37; Sacherer 1990:20).

Being Tamang is also by no means exclusive or static in modern Nepal. Through a variety of processes outsiders may 'become' Tamang. In Jetthul, as has been reported among other Tamang (Stevens 1993:39; Hall 1978:57) as long as there is no possibility of shared clan or

membership of an unclean *jat*, there are no social barriers preventing villagers taking spouses of non-Tamang communities. Although, as I show in chapter 7, this is not common, due to the high level of parental control of spouse selection it has occurred in recent years in Jetthul.

'Becoming Tamang' is a device that some marginalised people also use to improve their dealings with government officials. Cox reports that while Langtang Tibetans maintain their traditional clothing and ways of life and do not regard themselves as Tamang, they have been successful in obtaining government economic assistance by presenting themselves to officials as Tamang in order to avoid prejudice against *Bhotes*:

> By identifying themselves as Tamangs Langtang Tibetans reinforce their self-presentation as well-integrated citizens of Nepal, and avoid being disparaged as "squatters from Tibet" (1989:16).

2.4.3 Perceptions of the Tamang within the caste hierarchy

In order to understand the position of the Tamang within wider Nepalese society, it is necessary to present an interpretation of systems of social hierarchy in Nepal. Unlike the caste system in India, the hierarchy of *jat* in Nepal, far from being universal, is perceived in a variety of ways by different groups and individuals. Bista (1991:41-43) presents three models of the caste system prevalent in contemporary Nepalese society. The first separates ritually 'clean' *jat* from the 'unclean', via an impermeable barrier. These divisions are referred to as *chokho jat* meaning "ritually unpolluting caste", and *pani nachalne jat,* which is literally translated as "water unacceptable caste" and corresponds to the Indian 'untouchable' castes. Within this scheme of Nepalese caste hierarchy, the Tamang are regarded as an unpolluting, *chokho jat.*

A more complex model is presented as that perceived by those forming the wealth and power base of the country, the high caste Bahun[16] and Chetri communities. At the pinnacle of the hierarchy, the 'purest', priestly Bahuns are separated by an impermeable barrier from the aristocratic Chetri, Thakuri and all other castes of ritually lower purity. This model regards all castes from the Thakuri down as separated by a permeable barrier. The *pani nachalne,* "water unacceptable" *jat* , however, remain separated by an impermeable barrier from the ritually 'clean' *jat.* Within this perspective, there is a further division between communities that has a bearing on ritual purity, defined by *jat* association with alcohol consumption. The highest castes, the Bahun, Thakuri and some Chetri, are termed *tagadhari,* which refers to a ritual sacred thread worn across the body by males. *Tagadhari* traditionally avoid alcohol and its polluting properties. Some Chetri groups and subordinate *jats* are termed *matwali*, or

[16] Nepalese form of the Indian Brahmin caste.

Plate 2.10: The Kami blacksmith and his son.

"consumers of alcohol". Within this caste framework, the Tamang are regarded along with most other 'ethnic' peoples as low status *matwali*. And indeed alcohol forms a significant part of Tamang life.

The third of Bista's caste models is regarded by their author as the view and practice of the overall majority. This is based upon a simple secular hierarchy, whereby a permeable barrier separates the politically and economically powerful from the uneducated and poor ethnic *matwali* communities. Indeed, this view is in part adopted by the Tamang, who tend to ignore the 'superiority' of high castes, although they take care to observe non-acceptance of refreshment from *pani nachalne jats*, with whom they interact (Campbell 1997:219). In Jetthul, the Tamang had very clear guidelines on contact with the Kami family living in Samche, who as blacksmiths were a *pani nachalne jat*. In the first few days of my fieldwork, I visited this very kind family, unaware that they were Kami and therefore *pani nachalne*.

This made the Tamang community extremely uneasy and my visit was kept under close watch. My host Kami family were sensitive to the situation and at their own social expense withheld offering me refreshment, and in so doing prevented me from great embarrassment and a whole range of problems with my Tamang neighbours, assistants, landlord and research community. After leaving the Kami household, my Tamang neighbours disabused me of my naiveté and made known their disapproval of my association with them.

Although the majority of villagers were comfortable in their initial dealings with me during the early anthropometric phase of my field research when I was regarded on a par with health workers, as the nature of my research changed, traditional relationships between *jats* came to the fore. In a similar way to that in which Tamang families made clear their disapproval of any association I may have been considering with the Kami family, after my research became more qualitative, when I increasingly spent time in Tamang homes, the Chetri community in Samche

avoided close contact with me. Although people remained cordial and courteous, my close association with Tamang families and acceptance of their food and alcohol precluded the formation of a similar relationship and access to detailed ethnographic information from Chetri households. *Jat* dynamics as they were played out in individuals' perception of their own and others' status and ways of life were of such consequence in Jetthul that that it precluded detailed ethnographic research of households of the three distinct *jats* in the village of Samche.

2.4.4 Tamang women

Compared with those of wider Nepalese and Asian society, Tamang women and girls in Jetthul enjoy a high degree of gender equality (Acharaya 1994:1). This is visible in the freedom of movement accorded to married and unmarried girls within and beyond the village and lack of constraints surrounding contact between members of the opposite sex. Indeed, in daily life there is marked informality between peers and irrespective of marital status, intercourse between the sexes incorporates teasing, banter and joking. Unlike Hindu women in Nepalese society (Allen 1990:5-6), Tamang women also smoke tobacco, drink alcohol, and like their male counterparts, occasionally indulge in sex outside marriage without placing themselves in an untenable social position.

Tamang females in Jetthul, like their male peers, become more involved in decision-making as they mature. Traditionally at marriage, women become endowed with personal wealth, called *daijo*, by their parents as their rightful share of their families' property, which they take to their marital household. Articles such as livestock, grain, cash, gold and silver, jewellery and cloth ideally make up a woman's *daijo,* although its composition varies from a token amount of cash to more substantial property. That a woman's *daijo* is usually moveable in nature, unlike land and buildings owned mostly by men, has an important bearing on female economic empowerment. Women's *daijo* property remains theirs throughout life and they are at liberty to take it with them, should they leave their husbands' household. This provides them with a personal stake in the economics of their marital households' economy. The liquid nature of female assets is also important in that they can be both converted and expanded. A woman may increase her personal wealth by breeding her livestock and accrue interest on her assets by loaning grain and cash. Precious metals also have the potential for transformation into cash as required.

Although women often experience feelings of insecurity and loss of status when they move from their natal to their marital households, they are able to establish themselves and elevate

their standing in their new environment by producing children, especially sons. In so doing women hold the key to the future security and welfare of themselves and their husbands,and also their parents-in-law. Additionally, as I describe in chapter 7, through women producing children, couples become more self-sufficient and are able to set up their own household. In this way, female fertility is important in the dynamics of family fission and fusion and continuance of clan, the family line and economic welfare of senior family members.

In Jetthul, as Tamang women become more senior within their marital households, they also develop more economic empowerment within that domain. Most women who are the "mothers" (the most senior women) of their households participate in decision making with their spouses and manage their household's economies. While men conduct major farm purchases and sales, such as buying and selling livestock and crops, women handle any cash reserves and household petty cash and have a reputation for better financial skills and responsibility than their menfolk.

While Jetthul women have less autonomy in their choice of marriage partner, as I show in chapter 7, this is a generational aspect of marital (and indeed economic) decision-making rather than a feature of gender inequality, as young men are equally lacking in self-determination in this milestone in their lives. In later stages of their lifecourse, women display a key role and determining action in the nuptial decision-making processes of their own children and those of other kin. This is due in part to the central role of women in Tamang society both within and beyond the village in Jetthul. While chapters 4 and 5 describe how men work outside the village and migrate to urban and other areas of Nepal to engage in waged, non-agricultural labour, it is the women who travel between and stay in other villages at the local level. As I show in chapter 7, most women in Jetthul marry within a day's journey of their natal home, which they refer to as their *maiti ghar*. This distance is important as women maintain important roles in their ancestral homes after marriage where they continue to perform duties and participate in ritual throughout their lives. As sisters, women must return to exchange gifts with brothers during the festival of *Tihar*, and bonds between family members are reaffirmed throughout a women's life until they perform specific rituals, such as washing the faces of the dead at their parents' and siblings' death rites. In visiting their parents' and brothers' natal homes, women maintain strong channels of communication and information between households, villages and clans. In this way, they hold the power to extend the sphere of their marital households' social action and influence. Female agency is therefore at the heart of many inter-clan alliances and maintains relationships with households in other villages. As

such, women's knowledge and the lines of communication they maintain are crucial in determining the most economically and socially advantageous alliances forged through marriage.

There are certain aspects of labour and areas of Tamang life in Jetthul that are demarcated by gender. As I show in chapter 4, some agricultural and pastoral tasks tend to fall to females and others to males, although there are no rigid rules governing these activities. Women are, however, strictly prohibited from ploughing or touching a plough and from slaughtering animals and men are forbidden to brew and distil alcohol or have contact with articles used in its preparation.

While Tamang women are accorded a level of freedom, equality and respect within their own society, hegemonic values concerning gender, ethnicity and female sexuality are reflected in a stereotype of them being sexually "hot" and available. This together with their physical beauty and pale skin renders Tamang girls particularly desirable as commercial sex workers. Their traditional exploitation as concubines to the Rana court (Pradhan 1994: 35) has led them to be particularly sought after ever since, and is a factor held to be central to the modern rise in the trafficking of Nepalese women (Newar 1998). For many of the same reasons that Tamang women are targeted for prostitution and trafficking within Nepal, there is also a strong market for them across the border in India. Although as I set out in chapter 1, this form of exploitation of women has increased rapidly in Nepal in the last few decades, it remains poorly researched and quantitative data are lacking. Reports that Tamang women make up a substantial proportion of women abducted or deceived into a life of captivity and commercial sex work are widespread (Schubert 1999:21; Newar 1998; Tamang 1992) and are highlighted by the fact that the first recorded death of a Nepalese citizen from HIV infection was that of a Tamang woman (Tamang 1992:26). As I discuss in chapter 4, there is no evidence of female involvement in commercial sex or trafficking of women from Jetthul as occurs on a substantial scale at the village level in some villages in Sindhupalchowk (Newar 1998; ABC 1994:3-9; Pradhan 1994:36-38) and elsewhere in Nepal (Pike 1998:5). However, given the history of exploitation of Tamang women in Nepal and their increasing trafficking to meet the requirements of the international sex industry, girls and women in Jetthul are in a particularly precarious position, especially since the road now renders them easily accessible to outsiders.

2.5 Grounding my research within the national context

In order to place my research and the interpretation of my findings in Jetthul within the national context, I set out an overview of key areas of development in Nepal, relating to women, that are central to this thesis.

2.5.1 Agriculture

During the 18th century the Nepalese hills carried a low population density with communities subsisting via agro-pastoralism, employing shifting agriculture to grow staples of millet and buckwheat and where irrigation permitted, rice introduced from India (Seddon 1988:6). The introduction of maize early in the 19th century led to intensified farming and supported population growth in the hills (Regmi 1978:8), which in turn, led to cultivation of pasture land and a decline in the farming of sheep and goats (Blaikie *et al.* 1977:25).

During the Rana administration, agricultural output was raised by increasing the area of land under cultivation and by more intensive use of common land resources (Shrestha 1990:78-80; Blaikie *et al.* 1977:46). In the early 1900s, pressure[17] on land led to extreme forest cover clearance especially in the hills, where population growth exceeded the increase in food production (Pudasaini 1993:124). Like provision for industry, the government's five year plans failed to implement solutions to the increasingly acute food deficit in hill areas through improving agricultural production and addressing population growth (Tuladhar 1993:177). In the 1960s agricultural extension workers were recruited and District Agricultural Development Officers and Junior Technical Assistants (JTAs) trained and dispatched to deliver advice on techniques and technology to rural areas. From the time of their initiation through to my own fieldwork, JTAs have mainly failed to deliver assistance to farmers, as a result of low pay, poor resourcing and government support and lack of motivation (UNICEF 1992:25; Miller 1990:91; Amatya 1989).

It was only in the early 1970s that the 4th Plan incorporated and addressed population growth. By this time, overall increase in GDP, highly dependent upon agricultural production (Poudyal 1988:6; Regmi 1978:12), had been overtaken by population expansion (Pradhan 1984:70; Blaikie *et al.* 1977:19). Agricultural growth averaged just 1.5% per annum between 1970/1

[17] Nepalese data of any kind prior to the first census is very scarce. Using more recent data the pressure of population and land may be appreciated. Nationally population density rose from 56 people per square km in 1952, to 102 per square km in 1981. Early data were not collected by ecological zone, but in 1981, the population density in the hills was 117 per square km compared with 99 per square km in 1971. In terms of hill areas under cultivation, in 1952/4 each hectare of farmland supported three individuals, and this had increased to six by 1981. (CBS 1987:14,15)

and 1984/5, which was far lower than the average annual population increase of 2.7% throughout this period (CBS 1987:X). The critical situation in the 1970s and early 1980s and its antecedents are described by Seddon:

> ...there is ample evidence to suggest a crisis in overall food supply, resulting from the combination of increasing population and virtually stagnant agricultural production (1988:44).

The incumbent administration, however, failed to effectively address the situation, and support services to agriculture are assessed to have been poor in comparison to those of other LICs at the time (Blaikie *et al.* 1977:24). By 1980 Nepal was in receipt of World Food Programme and Indian food aid.

The Nepalese economy remains highly dependent upon agriculture. Over 80% of the Nepalese labour force are engaged in agricultural production and continue to rely upon farming for a significant part of their livelihoods (CBS 1995:211; Shrestha & Rayappa 1992:296). While women have become increasingly included in the rhetoric of agricultural planning, specific programme support is often lacking (Cameron 1998:13). The current agrarian situation is one of poor development (Seddon *et al.* 1998:3) and declining yields (Blaikie & Coppard 1998:31). With intense population pressure on the scarce land in the hills, some areas can no longer support and feed the local population (Pudasaini 1993:127; CBS 1987:X). In spite of development initiatives to increase land productivity through technological inputs in irrigation, chemical fertilisers and high yielding seed stock, improvements in agricultural output are judged to be poor (Shrestha & Rayappa 1992:296). In the decade 1969/70 – 1981/82 annual growth in cereal production was only 1.15% and that of cash crops 4.29% (Poudyal 1988:10). It is widely held that the increase in agricultural production, such as it is, is mainly attributable to increased area of land under production, rather than increased yields (Shrestha & Rayappa 1992:296; Poudyal 1988:12). In the Agricultural Perspectives Plan, that sets the development direction for two decades in the sector, road transport is a central strategic feature. Through the development of "agricultural roads" connecting rural farms with markets further afield, the government aims to improve the use of technological inputs and the sale of produce to develop and commercialise farming (APROSC 1995).

2.5.2 Industry

Nepal is among the world's least industrialised nations. Economic indicators such as the gross national product (GNP) of $170 per capita (UNICEF 1995:6) and low participation in wage-labour (Mellander & Jönsson 1993:17; Dahal 1989:83) reflect the low level of industrialisation and the country's dependence on subsistence farming as the main mode of livelihood (World

Bank 1992:218). While Nepal may have been a thriving centre of trade in its early history (Bista 1992:116; Pradhan 1984:48) by the turn of the century, competition from industrially more advanced India had overwhelmed some manufacturing sectors. Blaikie *et al.* (1977:85) consider Indian imports to have been a major factor in the decline of copper, brass, cotton, paper and other industries in Pokhara[18] and Tansen[19] around this time.

Government initiative in stimulating industrial growth has a chequered history. Throughout the century of Rana administration (1847-1951) communications were regarded as a potential threat to the *status quo* of the administration's interests (Bista 1992:27; Pradhan 1984:51), which hampered industrial and commercial development (Zivetz 1992:138). In spite of the country's lack of infrastructure, the period following the 1st through to the end of the 2nd World War was one of industrial opportunity and growth. Increasing demand for manufactured goods from India (whose importation of raw materials and industry had been paralysed by the war) led to a rise in Nepalese manufacturing and Indian investment in joint Indo-Nepalese industry, especially in food processing mills and plants producing other essential consumables such as textiles and soap (Poudyal 1988:179). Nepal was strategically placed to provide Indian demand with cheap labour and political distance from the war. The administration responded to the new commercial climate by passing the *Nepal Company Act* in 1936 to support and stimulate industry and banking. At this time the *Development Board for Agriculture Industry and Commerce* was formed and like other, subsequent boards for trade and industry established throughout Rana rule, is noted as having little positive effect upon development of the economy. It was, therefore, largely as the result of world events, rather than good administration that "...the industrial history of Nepal begins after 1936 ..." (Pradhan 1984:50).

Indian industry was re-established with the conclusion of the 2nd World War, giving rise to a depression in the market demand for Nepalese goods and a resultant decline in manufacturing. Some of the industries that had emerged and prospered with the war demised and closed down with peace. After the fall of the Ranas in 1951, Nepal, which had previously remained largely closed to outsiders, began to accept foreign investment and assistance. All foreign aid received in the first decade was in the form of grants, with the government of India and the USA being the first major donors (Poudyal 1988:178). Subsequent assistance has been in the more usual form of loans, which have not caused repayment problems experienced by other developing nations (Bista 1992:146).

[18] A modern day town and industrial centre in the centre of the Western Development Region.
[19] A modern day town in the south of the Western Development Region.

In the early 1950s industrial performance was poor and awaited policy development to provide assurance and stability for investors. A royal declaration was made announcing a *Five Year Plan* for development of state self-sufficiency and welfare provision. The Plan, which spanned 1956/7 – 1960/61, was effectively the first in a chain of five year development plans and therefore, became known as the 1st Plan. When it came into effect, only four of Nepal's industries were in a state of profit (HMG/N 2016 [1962]: 80). The objective of the new policy was to stimulate all levels of industry from cottage to formal manufacturing, through private and foreign investment and by government-sponsored technical support. Information, training and the provision and underwriting of loans were administered by the *Industrial Development Centre*, which was established in 1957 (Pradhan 1984:52).

Prior to the 1960s, urban centres and industrial towns outside the Kathmandu Valley were very few in number (Blaikie *et al.* 1977:78) and during this decade the first industrial centres arose both within the Valley at Balaju[20] and Lalitpur[21] and to the south at Hetauda. During this phase, industrial development became highly dependent upon foreign aid, the disbursements of which fluctuated dramatically over the next two decades. Conflict between India and China caused withdrawal of pledged aid from both donor nations in the early 1960s and at much the same time, Russia and the United States of America diverted aid anticipated by Nepal, vastly reducing projected expenditure (Poudyal 1988:179).

By the end of the 1960s, although there had been some growth in industry, it fell short of the objectives set out in the two previous five year plans, both in terms of output and the breadth of development. During this period only 15,000 labourers were engaged in the whole of Nepalese industry, which was characterised by small-scale, family-run concerns. Over 80% of the 1,257 industrial plants employed less than nine workers each and only 1% employed more than 100 (Pradhan 1984:61,64).

It was not until the 1970s that some geographical expansion of industry was realised, although regional concentration continued. The Western and Far-Western Development Regions remained the most poorly developed with the smallest proportion of the country's manufacturing: 15.7% and 9.3% respectively. Of the country's entire industry, 20% was

[20] Located a few kilometres north of Kathmandu.

[21] Also known as Patan, Lalitpur is situated directly south of the Kathmandu city boundary of the Bagmati River.

located in the Eastern Region and the majority, 54%, remained within the Central Development Region (CBS 1972-3:47), where Jetthul, the site of my study, is located. The 4th Plan, effective during the first half of the decade, focused on infrastructure development, especially road-building, which is reflected in the high proportion of foreign aid disbursement to this sector at the time (Poudyal 1988:179).

At the beginning of the 1980s, Nepalese development strategy began to target rural areas and women came to be considered in planning. The 6th Plan introduced the objectives of providing seasonal waged labour in the industrial sector for farmers (Pradhan 1984:95) and raising female status as part of general development (Tuladhar 1993:179). It was not until 1981 that the *Foreign Investment and Technology Act* and *Industrial Enterprises Act* came into force (Poudyal 1988:179), providing the guidance and protection urgently needed to attract foreign investment. Until this time, policy and taxation of foreign investment had fluctuated considerably creating a climate of poor confidence for potential investors (Zivetz 1992:140). Annual industrial growth increased by around 4.5% during the 1980's, but faltered at the beginning of the 1990's due to the trade dispute with India which led to restricted supplies and general shortages, most importantly of fuel (UNICEF 1992:21). The overall growth in GDP[22] has not kept pace with that of the population (Shrestha & Rayappa 1992:295; Blaikie *et al.* 1977:19) and since 1970 actual GDP *per capita* has fallen (Poudyal 1988:7).

The industrial situation in Nepal at the time of my fieldwork in 1989 through to the end of 1991, was characterised by development remaining localised within the Central Development Region, particularly in the Kathmandu Valley (Pradhan 1984:38). Most manufacturing was under government or private national ownership and there remained a lack of substantial foreign investment (Pradhan & Dhungel 1981). Instability resulting from the democracy movement in 1990, together with protracted disruption in the movement of goods and materials across the Indian border after the spring of 1989, when the *Treaty on Trade and Transit* expired, added to depress the confidence necessary to attract private foreign investment. Overall, Nepal's five year development plans are regarded to have failed to promote substantial industrial growth and to have suffered from over-enthusiastic targets (Poudyal 1988:3; Pradhan 1984:60,69). As a result, the country has a substantial trade deficit as importation continues to exceed exportation (UNICEF 1992:28; Zivetz 1992:143).

[22] Between the mid-1970s to late 1980s the actual contribution of industry to the GDP rose from 8 to 17% (UNICEF 1992:21).

2.5.2.1 Women in the wage labour market

The overall status of women in the labour market is very low in Nepal. Estimates suggest that over 96% of women shoulder at least 50% of agricultural production[23] (Joekes 1991; Joshi 1985; Acharaya & Bennett 1981:43), the majority of which is family-based. Less than 10% of women are engaged in non-agricultural employment and fewer than 1% are engaged in clerical, administrative and professional employment, and just less than 6% in more lowly and sales services (CBS 1995:211), reflecting in part, the lower level of literacy and education among the female population. Although many women work in unwaged family production, wages for paid farm labour are low and gender differentials in pay scales often exist with women receiving a lower daily rate than men. Joekes (1991) reports women earning US$ 0.6 compared with US$ 0.75 by their male counterparts for an eight-hour day. Within the Kathmandu Valley the female agricultural wage fell by around a third in the early 1990s. Acharaya (1995:164) suggests this might have resulted from the influx of labour from areas where the population pressure on available land has forced migration.

The proportion of women employed in manufacturing increased by a factor of six in the decade between 1981 and 1991, when they represented 23% of the workforce in that sector (Acharaya 1995:155). Women in manufacturing are concentrated in the most menial positions, even those with higher education (Thacker 1993:27; Basnet 1992; UNIDO 1988:35) and tend to be employed on a casual basis with greater frequency than their male counterparts (Acharaya 1995:163; Rana 1987:12). Thacker's (1993) appraisal of conditions and female status in Nepal's carpet industry found that Tamang women formed a significant proportion of the in-migrating labour[24] and were often paid at lower rates compared with more savvy local employees. Further exploitation was apparent as many itinerant workers paid a proportion of their earnings to recruiting 'agents'. Lack of education and awareness of true salaries further reduced female incomes: many women and girls interviewed were unaware of the sum of their gross salaries, let alone how much was skimmed by intermediaries (*ibid.*: 22-26). The overall picture of Tamang women in seasonal employment in the carpet industry was one of long working hours in poor conditions with women being disempowered by their lack of education and local knowledge.

Variation in participation in non-agricultural labour has been observed among the different ethnic and caste groups of Nepal. The Newar, traditionally artisans of the Kathmandu Valley, have the highest proportion of non-farming livelihoods, with hill groups having the lowest

[23] It is estimated that children contribute to 6% and men to 44% of household's productive labour.

[24] Quantitative data (Fricke, Thornton & Dahal 1990:288) confirm Tamang involvement in formal manufacturing to be concentrated in the carpet sector.

involvement. Chhetry (1996:98) views this as a consequence of poverty, but it is also a function of traditional and inherited livelihood, property, skills and education. The participation of women of different communities in non-agricultural labour is additionally affected by their status within their own culture as well as that of potential employers (Watkins 1996:145).

However unsatisfactory the wage labour situation for the majority of poor Nepalese women, many authors recommend increasing female participation in the waged work force. This is asserted to be an effective approach with which to address high population growth, pressure on available land, food deficits in subsistence farming and as a support of family planning and female education in Nepal (Suwal 1996:75; Pudasaini 1993:128; Tuladhar 1993:176; Shrestha & Shrestha 1991:34; Joekes 1991; Rijal 1988:12; Mathema 1988:22). Other authors, however, caution that the empowerment of women from more egalitarian hill groups, rather than being supported by wage labour, may be eroded in the formal manufacturing sector. This is because the majority of managers tend to be male and high caste Hindu, who impose their gender views in the workplace (Acharaya 1995; Folmar 1992:233).

2.5.2.2 Initiatives to increase female participation in the wider economy

During the mid-1970s the acute situation of many poor rural communities gained policy and programming intervention. The 5th Plan (1975/6-80/1) became a turning point in Nepalese development policy by focussing attention on the integration of social and economic development in rural areas, implemented through *Integrated Rural Development Projects* (IRDPs) such as the *Integrated Hill Development Project* (IHDP) (see section 1.1).

With the 6th Plan (1980/1-85/6) agricultural development, especially in the hill regions, became the focus of policy, together with the intention to raise female status as part of the plan to address population growth (Acharaya 1996:155). In 1983 the *National Commission on Population* set out an integrated approach to address high fertility and emphasis was placed upon the development of female status through education and participation in the wider work force (Tuladhar 1993:178). Policy was translated to the grass-roots by programming in which, for the first time, women formed the central focus.

Among poor, rural communities, women in particular, have the least ability to offer collateral for loans. Start-up capital, essential for initiating cottage industry and investment in agricultural inputs, is in the main, out of reach of poor farmers other than by high interest

informal personal loans (UNIDO 1988:X). The FAO and the International Fund for Agricultural Development (IFAD) initiated the *Small Farmers Development Programme* (SFDP) in several countries in south-east Asia including Thailand and Bangladesh as part of the Asian Survey for Agrarian Reform and Rural Development Programme. It was established in Nepal in 1975/6 in response to the need for capital by the rural poor whose social, educational and economic status prevented them from implementing improvements to their livelihoods. The SFDP offered unsecured loans to groups of farmers to fund approved projects aimed at increasing farm production and small enterprise. An integral part of the SFDP was concurrent support and development of local health, water and sanitation, education and family planning services (UNICEF 1990:VIII, 1). The programme is organised and implemented in Nepal through the Agricultural Development Bank (ADB), which administers funds and arranges local individuals with compatible needs and objectives into project loan groups. Groups co-operate both in achieving shared goals and joint responsibility for appropriate utilisation of the loan and repayment. The formation of co-operatives and peer policing of loans has led to a high level of programme success and loan repayment (Axinn 1992b:397).

For poorly educated rural women in Nepal, gaining access to credit has been difficult, apart from informal personal loans incurring extortionate rates of interest. Unmarried women have been especially excluded by lending institutions due to the tradition of women moving at marriage, which increases the risk entailment for lenders. As a result, women were not assisted in accessing loans by either the government or NGOs (Acharaya 1995:157, 162) until the *Women's Development Programme* (WDP) was launched in 1981 by the SFDP to specifically incorporate women in social and economic development. A year later UNICEF began funding health, education and community development aspects of this programme and UNFPA supported family planning education within the WDP (Chapagain & Shrestha 1989:151).

Like the main SFPD, the WDP provided unsecured loans to co-operatives formed by *Women Group Organisers* and, in addition to administering loans, arranged information dissemination on health and nutrition and supported group saving. Eight years after its inception, more than 5,000 women in just under 400 co-operatives had become WDP loan recipients. In the 1980s the progress of the SFDP in promoting female income generation received mixed reviews. Assessment ranged from highly successful by the Nepal Rastra Bank (1982) to ineffectual by the Centre for Women and Development (1986) (Chapagain & Shrestha 1989:152). The 1990 UNICEF evaluation of the project was critical of the poor preparation of the extension workers, lack of technical support for small enterprise and cottage industry and disappointing general

under-achievement of loan potential. However, there was increased use of family planning services, sanitation development and adult literacy improvements among project members. As with the larger SFDP, loan repayment was also very high.

Seven years after the SFDP was initiated, The Women's Development Section[25] of the Ministry of Local Development,[26] with the financial support of donors including USAID, UNICEF and the Dutch government, launched a programme called *Production Credit for Rural Women* (PCRW) in the year 1981/2, (UNICEF 1990:VIII, 1). The programme, as its name indicates, was developed to provide credit exclusively for rural women, with an emphasis on developing female empowerment and community development through women's activities. These objectives were supported with training to increase the skill base of women and improving income generation potential by developing a supportive infrastructure for small enterprise (UNICEF 1992:96,163).

PCRW is administered centrally by the *Nepal Rastra Bank* through the Agricultural Development Bank and two mercantile institutions: the *Rastriya Banijya Bank* and the *Nepal Bank* and locally by Women Development Officers (WDOs), Women Development Associates (WDAs) and volunteer agencies including the American *Peace Corps*. Unlike the field staff of the SFDP, the WDOs and WDAs have been assessed as highly motivated and successful in implementing the programme's objectives. The female stakeholders themselves have proved to be potent in stimulating local development, in addition to generating income and repaying their loans (UNICEF 1990:VIII, 1). It has been estimated that by the end of 1991 over 28,000 rural women had received training and just fewer than 8,000 were recipients of PCRW loans.

In spite of criticism of the efficiency of the SFDP, the two programmes are credited with assisting positive improvements in the status of rural women (Acharaya 1995:156; UNICEF 1992:97; Axinn 1992b:398,409; Chapagain & Shrestha 1989:152). The main shortfall in these projects is poor coverage. Although the two programmes directed some NR 400 million towards rural women during the 1980s, it is estimated that the number of recipients have been less than one million (Acharaya 1995:156), which is only around 10% of the female population. At the end of 1991, PCRW had extended to only 50 Village Development Committees (VDCs)[27] in less than 50[28] of the kingdom's 75 districts and the Women

[25] This was later elevated to divisional status (UNICEF 1992:97).

[26] This was known as the Ministry of Panchayat and Local Development prior to 1990.

[27] After the establishment of the new constitution in 1990, the administrative areas previously termed panchayats were renamed *Gaon Bikas Samiti* ("Village Development Committees" or VDCs.)

[28] UNICEF (1990:VIII, 1) indicates that PCRW spread over 44 districts, while Ojha & Weber (1992) suggest coverage of 49 districts.

Development Programme of the SFDP covered 183 VDCs confined within 36 districts (UNICEF 1992:96,163; 1990:VIII,1; Ojha & Weber 1992).

2.5.3 The education system and policy

The powerful Rana dynasty left a great impression upon the education system throughout their century of rule between 1847 and 1951. Among these was the introduction of an English influence to the education system by Jung Bahadur Rana (Prime Minister 1846-78). After visiting England around 1850, he established *Durbar* ('Palace') *High School* within the Rana palace confines, for the exclusive use of Rana family children. From the very beginning of Rana rule, schooling and education, like communications, were regarded as powerful instruments of change. As such, education was not initially extended to the masses.[29]

Jung Bahadur's successor, Ranoddip Singh Rana (PM 1878-86) moved the school from the palace grounds and widened access to include the children of high status individuals connected with Rana affairs. The school was based upon the English education system of the time and core subjects of English and mathematics were taught. Over the next few years, a handful of schools were opened based upon Durbar High School, educating the elite's children from the ages of seven to eight, for nine year grades.

No further schools were founded for almost 40 years until Dev Shumsher Rana became Prime Minister at the turn of the century (PM 1901 for a few months). He rapidly founded between 150 and 200 vernacular primary schools, 50 in the Kathmandu Valley and the others further afield. These were equally rapidly dissolved by his deposer and younger brother Chandra (PM 1901-1929), who regarded them as a threat to mass obedience. Driven perhaps by the increasingly pressing need for educated staff, Chandra later established highly controlled directly funded schools to educate his family and government administrators - again serving only high status pupils. In spite of Chandra Rana's oppressive education policy, he founded the Kingdom's first modern college in 1918, called Tri-Chandra College, and established the School Leaving Certificate (SLC) which remains the Nepalese educational standard today.

It was not until 1947 that the first provision was made for educating girls, when *Padma Kanya School* was established in Kathmandu.

[29] More powerful and wealthy individuals' perception of mass education threatening subservience is reported in 1950's rural south India by Srinivas (1976) and contemporary Nepal by Miller (1990:85), who observed local landowners' reluctance to include in school the children of families from whom they hired labourers.

When the Ranas were ousted from direct power in 1951, their legacy from a century of chaotic, elitist, educational control was a national literacy rate of 2 - 5% (Bista 1991:127; Seddon 1988:249; CBS 1987:128). Many schools and higher education colleges were established following the fall of the Rana autocracy in 1951. Amongst these, in 1953, was Padma Kanya College for young women (Majupuria 1991:227). Development initiatives after 1951 broadened employment opportunities and created a demand for educated professionals in the workforce. In urban centres this increased the demand for education as it provided a route to advancement through high status employment. In rural areas, education continued to be regarded as irrelevant by the majority.

In 1951 the post of Minister of Education was established and the contemporary Ministry of Education and Culture was founded on the Indian model, giving rise to a highly bureaucratic machine. School building throughout this decade was mostly undertaken by the entrepreneurial, wealthy sector of society to meet their own family requirements, who, once schools had been established, sought government funding. Because schools were established through this middle-class route, they were not founded by or to serve poor and unempowered ethnic peoples (Miller 1990:85; Bista 1991).

As a more open foreign policy developed, Nepal began to attract foreign aid due to its strategic geographical location. From as early as 1954 American financial and technical assistance was influential in developing the National Education Planning Commission (NEPC), which set out to assess the national state of education. The 1956 NEPC report was central to educational policy for a further decade and a half (Manandhar 1982), during which time the first teacher training college and university[30] were founded.

Throughout the late 1950s and early 60s the number of schools increased, although the initiative for school building remained at the community level, which maintained the ethnic and socio-economic disparity in access to education. According to Subedi (1993), the decreasingly democratic political climate after 1960 nurtured a school curriculum designed to strengthen the notion of a party-less political system, rather than meeting the country's manpower needs. During this period, schooling came to represent little more than a route for the privileged to gain access to administrative jobs (Bista 1991:124). Legislation passed in the 1963 *Naya Muluki Ain* ("New Law of the Land") obliged education establishments to admit all

[30] This was Tribhuvan University, established in 1959.

Nepalese citizens, regardless of their caste or ethnicity. While in principle, education became open to all, in practice, education of the poor remained opposed and constrained by higher echelons of society (Karki 1998:188).

The National Education System Plan (1971-75)[31] (NESP) was devised with the direct involvement of the monarch[32] and crown prince[33] to bring schools under direct central control and to introduce a more technical and vocational curriculum (CBS 1995:355). One of the major objectives of the NESP was to increase allegiance to the King and develop patriotism (Whelpton 1997:48).[34] The NESP also aimed to improve the quality of education by providing teacher-training and teaching materials. In terms of finance, teachers were awarded a pay increase and the NESP declared textbooks and schooling at primary level to be free of charge (Shrestha 1976). Since the introduction of free primary schooling there has been a marked increase in school enrolment, although as Manandhar (1982) notes, the number of teachers has not risen proportionally.

The NESP was followed by a further five year plan (1975-80) which, apart from providing for textbook and curriculum revision, additional school materials and expansion of free primary schooling, contained much the same policy as the previous five year plan. By the end of the 1970s there had been a failure to implement NESP strategies and a failure to improve school facilities and the quality of education (Kansakar 1988; Manandhar 1982; Kasaju & Shrestha 1979) and the system disintegrated (Subedi 1993; Bista 1991:127). School enrolment, however, continued to increase (Reinhold 1993; UNICEF 1992:47; Grover 1991:29; Basnet 1989; CBS 1987:142) and since then, education policy in Nepal has drifted towards that prior to 1960 (Bista 1991:127).

2.5.3.1 Girls and women in education

In modern-day Nepal the quality of education, especially that serving rural communities, is poor. While the NESP introduced a common curriculum in the early 1970s there is poor standardisation of facilities and teaching methods (Manandhar 1982:36). Teaching qualifications are not a prerequisite for teaching positions in Nepal (Mali 1982:87) and in 1989, only a third of teachers had undertaken teacher-training and just 12% were women (Subedi 1993:39). Furthermore, the kingdom provides no legislation to regulate the many

[31] Some authors (Subedi 1993; Acharaya, 1987) refer to the NESP as the 'New Education Plan'.
[32] At the time this was King Mahendra.
[33] The crown prince at the time was Birendra, who is the current monarch.
[34] The rulers' concerns about loyalty, especially of the ethnic hill and borderland groups are reflected in various micro-level ethnographies. Watkins (1996:55) discusses special trade privileges awarded to the Nyeshangte in return for loyalty to the crown.

private schools.[35] As this sector often caters for boarding children, who do not have regular access to communication with their parents, this is of particular concern, both in terms of lack of monitoring of educational quality and child welfare.

In 1971 HMG, with technical and financial support from UNICEF, UNDP and UNESCO, launched the *Equal Access for Women to Education Programme* to address female schooling in poor rural communities (Basnet 1989). This programme provided two 10-month courses, corresponding to pre- and post-School Leaving Certificate level respectively, with the objective of providing pre-teacher training education to poorly educated young women. The higher course was abandoned in 1977, but the lower level was remodelled, expanded and relaunched as *Education for Girls and Women in Nepal* in 1983 under the newly established *Office of the Women's Education Programme* within the Ministry of Education and Culture (MEC). This female-centred office of the MEC, with the assistance of international agencies such as NORAD and UNICEF, determined budgetary and human resource allocation within the programme. Students were provided with free tuition, learning materials, hostel accommodation and a small, but not insignificant allowance. By 1987, the programme had effected the training of over 2,000 female teachers.

In addition to increasing the number of female teachers, projects have been designed specifically to target girls whose work schedules preclude access to education. Among these is the innovative *Cheli Beti* ("Young Girls") project, which offers girls a 9-month course of two hours daily 'out-of-hours' schooling. *Cheli Beti*[36] was originally piloted in the far-western region of Seti in 1984 and, following its initial success, has since been expanded nationally through the Office of the Women's Education Programme. The Women's Non-Formal Education Programme also provides non-formal education for both women and girls.

Out-of-school children of both sexes have been the focus of the *Shiksha Sadan*[37] ("Accelerated Schooling System") programme. This provides tuition enabling children to 'catch-up' and enter school at the second or third grade of primary school. The majority of pupils enrolled are female.

As a result of policy and planning specifically focusing on increasing female participation in education, concurrent with other socio-economic developments, there has been a steady

[35] These commonly proclaim themselves to be 'English Boarding Schools.'
[36] This project is more formally known as the Education for Rural Development/Seti Project
[37] This was under the Primary Education Project.

increase in female school enrolment since educational data collection began in the early 1950s (CBS 1987:139; CBS 1995:358). The gender differential, however, remains in both enrolment and drop-out, with girls continuing to gain less schooling than boys. Overall the national primary education situation is characterised as being of poor quality, with a large 'out of school' child population and a large drop-out rate of enrolled pupils (Manandhar 1982:9). The high disparity in access to education is mediated by economic status, caste, ethnicity, gender and geographical location (Chhetry 1996:101-108; Kansakar 1988).

2.5.4 Mass media

Like many aspects of Nepal's development and modernisation, mass media has a mixed past reflecting policies of different rulers and administrations. Public cinema, for example, was introduced to Nepal early in cinematic history. At the beginning of the century, film shows were included in the festivities of the inauguration of the more liberal Prime Minister Dev Shumsher Rana. Following deposition by his brother Chandra, public film screenings were prohibited. Mass communications, like mass education were regarded as a threat to Rana control and suppressed until the fall of the autocracy in 1951 (Leichty 1997:33; Blaikie *et al.* 1977:27). Since this time there has been rapid development of national mass media and importation of foreign material. Cinema became established in Nepal in 1951, grew rapidly and by the early 1990s there were over 80 cinema houses in Nepal, mostly concentrated in urban centres and the Terai. It has remained the most popular form of visual media in the country.

Television is one of the most rapidly expanding forms of mass media in developing countries, where viewing is estimated to have increased by 20% each year over the last decade (UNFPA 1996:43). *Nepal TV* (NTV) established in 1985, is government controlled and until earlier this decade, was the only broadcasting station in the kingdom. The popularity of television has accelerated in urban areas throughout the early 1990s and is mostly aggregated in the Central, Eastern and Western Development Regions, (UNICEF 1992:177). Although only a small proportion of the total population is estimated to view regularly (23%), within Kathmandu a significant proportion of households are estimated to have access to television (Acharaya 1998:192). Access to a broad range of international broadcasts has increased rapidly as the initial high cost of purchasing satellite-receiving equipment – about NR 35,000 – has been overcome by entrepreneurial ingenuity. Many households receiving satellite channels share the cost of antenna dishes (Bhattarai 1989:13), while others 'sub-let' their reception (Wilmore 1998:8). This has had a dramatic effect upon the nature of material available for domestic

viewing: Bhattarai, while avoiding mention of sexually explicit programmes transmitted by satellite, vividly describes the changing nature of viewing:

> ... the forest of antennae over Kathmandu's medieval skyline thickens and cables that snake their way from house to house bring the latest episode of 'Mahabharata' to viewers tired of watching seminar/inaugurations and station-sponsored volley-ball matches on NTV (1989:13).

Effectively, therefore, within a decade of the introduction of the few hours daily transmission of low technology, low budget NTV in 1985, (primarily urban) Nepal has become exposed to high-budget American blockbuster movies, international advertising and pornography.

The press, suppressed under Rana rule, developed after 1951. The *Gorkhapatra* was Nepal's first national newspaper established in 1901 and was heavily directed by the Rana administration (Malla 1983:65). In the early 1990s the main government controlled newspapers The *Rising Nepal*, an English language broadsheet and the *Gorkhapatra* had a low national coverage with circulation figures of 15,000 and 35,000 respectively (UNICEF 1992:175). The democratic constitution of 1990 provides greater press security and freedom, which together with growing computer competency and hardware availability has nurtured growth in desktop publishing and the establishment of small newspapers and journals. There are now almost 600 newspapers produced in Nepal, including 82 daily and more than 450 fortnightly publications. Although the press, like most forms of mass media is concentrated in the Central Development Region, nine of the country's 14 administrative zones produces at least one local daily news paper (CBS 1992:143). Although no clear data exist, road provision might be expected to increase the circulation of newsprint in rural areas, although this would be constrained by the lower proportion of literate people outside urban settlements.

Popular literature, both produced nationally and imported from other parts of Asia, Europe and America has also increased in circulation, especially with the rise in urbanisation and literacy (CBS 1995:358). *Swasnimanche*, the first Nepalese magazine aimed at a female readership, was established in 1958 (Subedi 1993:77) and has been followed by several others such as *Richa, Mari Manch, Asmita and Riwaj*. In recent years there has been a general increase in publications targeting particular sections of Nepalese society including *Himal*, an English language journal of development and social issues in Asia, *Yuva Mancha* teen magazine and *Muna* children's comic. As I show in chapter 5, in some rural areas there are few publications and circulation of the majority of news media and popular literature remains concentrated in urban areas.

During the proliferation of the Nepalese media in 1951, one of the most influential and wide-covering channels of communication was opened. *Radio Nepal*, like NTV was owned and controlled by HMG and continued as the country's sole radio station until the early 1990s. Since 1990 programmes have been broadcast in several languages including Tamang and Newari in addition to Nepali, Hindi and English (New Internationalist 1997:5; UNICEF 1992:176). Radio Nepal has the greatest potential national coverage of all modern media, as transmissions are received throughout an estimated 90% of the country. Programming consists of a mix of light entertainment, commercial advertising, development slots, documentaries and news bulletins. Although Radio Nepal has received foreign technical assistance from countries such as Britain, funding, expertise and technology remain low. While estimates exist of the number of radio receivers in the country, as I discuss in chapter 5 the proportion of the population owning a powered, functioning radio has not been considered to date.

2.5.4.1 Use of mass media in development, family planning and health promotion

In LICs such as Nepal, where over 90% of the population is dispersed in rural settlements, with a low literacy level, served by a poor and largely impermanent road network, mass media play a key role in the diffusion of development innovations and ideas (Piotrow *et al.* 1994:2; Chapagain & Shrestha 1989:141). It is only since the 1970s, however, that government, NGO and multilateral agencies have directly utilised mass media to raise awareness of health, family planning and stimulate contraceptive services uptake to effect fertility decline in Nepal (NFHS 1996:12; UNICEF 1992:145; UNICEF 1990; Chapagain & Shrestha 1989:142; Tuladhar 1989:9). Health promotion broadcasts, such as *Radio Doctor* supported jointly by HMG and UNICEF are regularly commissioned to raise awareness of health issues (UNICEF 1990). Some long term radio campaigns such as UNICEF's oral rehydration programme *Nun-chini-pani* ("salt-sugar-water") have been notably successful in generating awareness of health issues and changing behaviour (UNICEF 1992:179). Recent research into of the efficacy of audio-visual media in an HIV awareness and condom use campaign found that between 79 and 93% of commercial sex workers and their clients became aware of these issues through these media (AIDSCAP 1997:7).

In addition to direct development messages broadcast by government and other agencies, popular media present subtle yet powerful messages concerning lifestyle. Stories, songs, news reports, the Internet, television, film, video, radio plays and cinema vividly present alternative ways of being. Imagination is stimulated by the fantasy lives of heroic figures which nurtures novel aspirations, especially among the youth whose lack of marital ties and offspring render

them free to aspire to their dreams. With growth in commercial advertising in Nepal, upon which many media channels depend for revenue, there has been a rise in consumerism. One effect of this is reported to be changing eating habits, both in urban and rural areas:

> Sizzling commercials on Nepal TV depict junk food enthusiasts nibbling noodles as today's culinary role models...Voluptuous noodle lovers grace television screens and radio jingles exhort Nepalis to devour the stuff... The ads seem to have worked like magic – the crinkly packets are now found from tea shops in Jogbani in the eastern Terai to trekking lodges below Thorung La in Manang at 5,400m (Khanal 1989:10).

2.5.5 Autonomy of Nepalese women

Within the ethnic and cultural diversity of Nepal,[38] there exists a broad spectrum of female empowerment and standing within different cultures. In terms of independent mobility, decision-making autonomy and empowerment within the household, a broad trend has emerged of higher female autonomy among Buddhist women of Tibetan descent, in comparison with high caste Hindu women of south Asian ancestry (Acharaya & Bennett 1981). Furthermore, Niraula & Morgan (1996:36) observed female empowerment, measured by freedom and movement and decision-making autonomy, to be lower among women of the Terai than those of hills communities. Research more specific to my own study, reveals that lower caste hill women exhibit a higher degree of autonomy in the marriage process and subsequent fertility decisions than their higher caste Hindu counterparts (Dahal 1996:150; Folmar 1992:253).

Overall, female empowerment in Nepal is low, which is reflected in lower education, literacy, participation in the non-agricultural labour force (CBS 1995:380,365,211) and poor representation of women in political office (Acharaya 1995:167). This is further underscored by reports of substantial trafficking of women and girls into foreign and domestic commercial sex work discussed in section 1.2, together with female exploitation in the domestic industrial sector (Thacker 1993:20).

2.5.6 Fertility and family planning

The population of Nepal, estimated to be around 21.5 million in 1995 (UNDP 1998:177), has exhibited a very high annual growth rate in recent decades that reached a mean of 2.66% per annum between 1971 and 1981 (CBS 1995:2). Past and projected population doubling times vividly illustrate the impact of such a rate of population growth. While the 1911 Nepalese population of 5.64 million took 60 years to double (CBS 1987:14), current projections from

[38] Scholars of Nepal's ethnic composition and people themselves use a wide variety of definitions for inclusion in particular groups (Gellner 1997:3-31). This precludes quantification of Nepal's ethnic diversity, although some indication is provided by the 1991 census, which recorded over 20 national languages (CBS 1995 :302)

the 1991 Census indicate population doubling time to be almost halved to 33 years (CBS 1995:2). Fertility and the rate of population growth in Nepal are regarded as too high to support economic growth and improve living standards, both by external agencies (PRB 1992) and the government (IPPF 1994:15). His Majesty's Government responded to the situation with the introduction of the *Family Planning and Maternal and Child Health Project* (FP/MCH) in 1965-66, when the total fertility rate[39] (TFR) was 6.2 (IPPF 1994; Glennon & Fegan 1993:612). From its instigation, Nepalese family planning has been based upon a strategy of provision of free sterilisation through mobile surgical units. It was not until 1983 that the instigation of the National Population Strategy shifted policy emphasis from permanent to temporary methods of family planning in an effort to improve the prevalence of contraception (Suwal 1996:73). Consequently, it has only been since the late 1980s that temporary methods have become more available in Nepal, largely through the activities of NGOs (Tuladhar 1993:175; Glennon & Fegan 1993:612).

Although the government initiated the FP/MCH project in the late 1960s, family planning did not become a focus of government development policy until the 4th Plan 1970-75 (Tuladhar 1993:177). *The National Commission on Population* was subsequently established in 1978 to integrate population policy into wider development strategy and reduce the total fertility rate of the country to 2.5 by the beginning of the new millennium. Between 1994 and 1996, however, the NFHS determined a TFR of 4.6 (NFHS 1996:6), which is high even when viewed in the Asian context, and indicates that fertility remains markedly higher than the government's target (UNFPA 1993:6).

Currently, the Ministry of Health provides family planning, with support from bilateral and multi-lateral donors including USAID and UNFPA (UNFPA 1993:3), through the FP/MCH project and the *Integrated Community Health Services Development Project* (ICHSDP) (Pathak 1990:43). Contraceptive services are delivered through some 260 FP/MCH clinics and the ICHSDP-run health posts. The health posts, organised at *ilaka* (sub-district) level, were instigated to deliver health at the village level through *Village Health Workers, Auxiliary Nurse Midwives* and to distribute essential drugs. In reality, the majority of health posts are poorly resourced and have inadequate staff and supplies. Access to many involves long journeys on foot from the communities they serve, and given the reputation of health posts of having few medicines, absent staff and often being closed, few people risk a wasted journey and utilisation is estimated to be only 15% (UNICEF 1992:121). This reflects the general situation of

[39] TFR is an index of the mean number of children born alive, per woman of reproductive age.

inadequate staffing of health and family planning outlets in Nepal (McIntosh 1993:7-1).

Of the many NGOs providing contraceptive services, the Family Planning Association of Nepal (FPAN), part of the International Planned Parenthood Federation, was established in 1958 and is the most long-serving and substantial (Pathak 1990:41; Thapa 1989:39). It is estimated that FPAN alone provides 25% of the country's family planning through its 31 projects, including 362 clinics providing temporary contraception and surgical sterilisation (IPPF 1994). The sole commercial agency involved in the provision of family planning is the Nepal Contraceptive Retail Sales Company (CRS). As the country's main supplier and distributor of contraceptives, the CRS is vital to national family planning logistics. Established in 1978, the CRS receives contraceptives, mostly condoms, oral contraceptive pills and vaginal spermicides from USAID, which it packages and distributes through retail outlets (UNFPA 1993:36). Condoms are sold under the brand names of *Daal* and *Panther*, and oral contraceptives as *Nilocon* and *Kanchan*. All government and non-government organisations active in family planning in Nepal are controlled by the National Commission on Population in an attempt to regulate and co-ordinate efforts.

Legislation permits all family planning methods and is permissive concerning the control of technologies, and no import license is required for contraceptives (PRB 1992). The law concerning abortion, however, is stringent and at odds with the code governing medical practitioners (Thapa, Thapa & Shrestha 1994:254). This has resulted in widespread disagreement as to the legality of medical termination of pregnancy (Risal & Shrestha 1989:38; Tuladhar 1989:9). While legislation completely prohibits abortion (Institute of Law 1979), the Nepal Medical Council permits physicians to terminate pregnancies that pose a direct risk to maternal physical or mental health, or if fetal malformation is indicated (Nepal Medical Council 1967). The reality of the situation is that the majority of women incarcerated in Nepalese prisons are serving sentences of up to 20 years for being found guilty of aborting their fetuses (IDS 1985:I). In spite of the severity of control of induced abortion, in rural areas prevalence is estimated to be between 3.58 (IDS 1988) and 117 (Thapa *et al.* 1994:260) per 1,000 women of reproductive age. This reflects both problems of contraceptive service delivery in rural areas and the lack of indigenous knowledge and practice of avoidance of conception[40] (NFHS 1996:7-10).

[40] The NFHS reports that sexual abstinence is the most commonly known method of pregnancy avoidance among rural women (NFHS 1996:7).

Chapter 3

Methodology and treatment of data

...it is more fruitful to conceptualize qualitative and quantitative [data] as the two poles of a continuum
C.M. Obermeyer (1997:814)

The main body of fieldwork forming the basis of this thesis was conducted between July 1989 and December 1991. Further field research was carried out between March and April 1993. The data presented here are part of my wider research investigating community coping strategies carried out in a number of villages in Sindhupalchowk District.

I arrived in Nepal in early June 1989 and spent the first six weeks learning the Nepalese language, exploring local data and literature sources and visiting government, non-government and international development agencies. During this time, I made a preliminary visit to the field in order to meet the communities, assess the feasibility of my proposed research and community support, set up accommodation and generally familiarise myself with the villages.

3.1 My approach to fieldwork

From the outset, my field methodology included both formal structured survey combined with ethnographic research. Qualitative observation grounded my quantitative data within the ethnographic context, adding depth to interpretation of surveys. As my research evolved, I was able to develop my combined ethnographic and quantitative approach into what Caldwell *et al.* term "microdemography" (1988:46). This approach to the research of demographic change has proved enlightening both in the Indian (Caldwell *et al.* 1988) and Nepalese context (Dahal & Fricke 1998; Karki 1998; Fricke *et al.* 1991).

Because of the initially large coverage of my study, I employed field assistants from among graduate students of Tribhuvan University. For the majority of time, two assistants, one male and one female, accompanied me to the field. Both spoke good English in addition to Nepali and Newari. As my field research evolved into in-depth surveying of Tamang women, a male Tamang student from Kathmandu joined the team.

3.2 Fieldwork and the evolution of my research

I began fieldwork in July 1989. My initial research in Sindhupalchowk District set out to investigate nutritional and economic coping strategies among Tamang, Newar, Chetri and Kami communities in four villages in the two Village Development Committees (VDCs) of Attarpur and Jetthul. These are shown in figure 3.1 below. I began by taking a census of all people in the communities and devised a system of personal identification codes, incorporating individuals' VDC, village and household. Genealogies were mapped out at the household level, and age in years and according to indigenous systems was recorded.

Figure 3.1: Jetthul and Attarpur VDCs in Sindhupalchowk District (Redrawn from an original by A.K. Thaku and the Ministry of Local Development)

From the outset, my fieldwork was met by good community co-operation. This was due in part to the most visible aspect of my early field research on child growth and health. This, from the villagers' perspective, denoted and legitimised my "work". That my presence and perceived function came to be regarded as beneficial, overcame potential problems of being accepted as an outsider. Regular growth and nutritional monitoring using anthropometric equipment became a source of entertainment and the feedback I provided to parents concerning their children's development spawned interest in my work. Together with the goodwill of the community, these features of my early fieldwork encouraged an atmosphere of co-operation and motivated a high level of participation in the study. These foundations gave me an excellent entry point for research into other areas of village life.

Plate 3.1: Nutritional monitoring in Jetthul.

During the early months of fieldwork I became increasingly interested in the effects on the community of recent changes in local infrastructure including the building of a school, electrification, the introduction of piped water and perhaps most importantly of all, the opening of the nearby Lamosangu-Jiri road link to Kathmandu. In the midst of these changes, there was a severe lack of local modern health facilities and I was asked on many occasions to give medical assistance. Throughout the course of my preliminary ethnographic enquiry concerning motherhood and children, it became apparent that women held a strong fear of death in childbirth and early on, women asked me for contraceptive "medicine".

Towards the spring of 1990, the communities in Attarpur became increasingly embroiled in the political turmoil of the democratic movement that climaxed in April 1990. Tempers, which are reputed to be quick and hot among the Tamang, were ignited by the establishment of political parties in the villages. Conflict arose between communities, political factions and ethnic groups. Daily life became increasingly violent and unpredictable and after eight months in the

Plate 3.2: Anthropometric measurement generated interest among villagers.

field, I withdrew with the field assistants to Kathmandu.

The time I spent in Kathmandu, in addition to witnessing the historical events of the democratic movement, provided a period of further research and reflection and I pursued my interest in how the advent of the Lamosangu-Jiri road had impinged upon life in the surrounding communities. At that time, as I set out in chapter 1, monitoring of the impact of the road tended to assess development trends and change at the area level, and there had been less emphasis on in-depth research of effects by gender (INFRAS 1988). This reflects the general dearth of research into the effects of developing road transport in Nepal upon women, which has only recently begun to be addressed (Seddon & Shrestha 1998). This led me to consider the question of how the advent of the road had affected women's lives in my research communities. Given the high rate of population growth in Nepal and concern to reduce fertility (UNDP 1996:177), together with women's requests for family planning assistance in the villages, I developed the focus of my research towards the investigation of change in aspects of female life and development that are linked to fertility. On this basis, I planned the next stage of my research to determine whether there had been detectable change in women's life experience and reproductive behaviour since the road had been built, creating a rapid link with local administrative centres and market towns, urban centres including the capital, Kathmandu and other modernising influences.

3.2.1 The Tamang Family Research Project

The evolution of my research was further advanced by correspondence with Dr. Tom Fricke of the Institute for Social Research, Michigan. Dr. Fricke very generously offered me use of the questionnaire he had developed and applied to two large Tamang communities in rural Dhading in west-central Nepal and peri-urban Sangila within the Kathmandu Valley. Data generated by Fricke and others in Timling and Sangila is known as the *Tamang Family Research Project* (TFRP).

The Tamang Family Research Project is an extensive study of social, economic and demographic change in Nepal described in detail elsewhere (Dahal & Fricke 1998; Fricke, Axinn & Thornton 1993; Fricke *et al.* 1991). Quantitative and qualitative data were collected from two distinct communities in widely differing settings and with very different access to motorised transport between June 1987 and January 1988, although earlier fieldwork had been carried out in one of the communities, Timling, in 1981-2 (Fricke *et al.* 1991:1). The remote rural settlement referred to as Timling, comprises four hamlets situated in Tipling Goan Village Development Committee in northern Dhading District. The other community, an aggregation of villages in the north of the Kathmandu Valley around Budhanilkantha, is referred to collectively as Sangila. While the economies of both communities are essentially reliant upon agriculture, they differ in their degree of dependence upon family-based farming, distance from Kathmandu, degree of monetarisation, educational and wage-labour opportunities and access to health and family planning services (Dahal & Fricke 1998:60).

The Timling community, shown in figure 3.2, comprised 669 people in 142 households consisting of 235 females over the age of 12, 188 of whom had ever married and 47 of whom had never married (Fricke *et al.* 1991:29, 93). This particular community was selected as representing a setting with limited educational opportunities, as the local school was established only in the 1970s, and wage-labour options were limited due to its location.

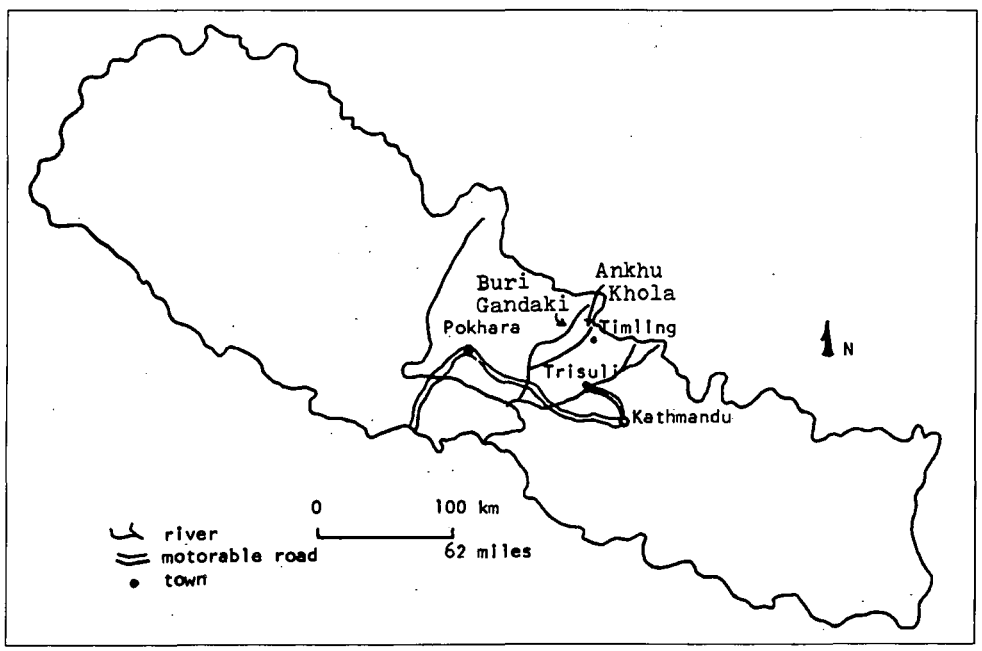

Figure 3.2: The location of the TFRP Timling community (from Fricke 1993:32).

Furthermore: "Timling, our remote settlement was chosen to represent a community at one extreme of the continuum of integration into Nepal's rapidly monetizing infrastructure. Located far from roads and markedly subsistence oriented, it was a community with minimal participation in government sponsored programs" (Dahal & Fricke 1998:63). Timling is situated near an old trans-Himalayan trade route that ran from Trisuli to Tibet (Fricke *et al.* 1991:53). Closure of the Tibetan border following Chinese invasion, severed economic links to the north and led to a shift in movement and economic activity towards participation in waged labour further afield from Timling (Fricke 1995:28). Although situated only 50 miles from Kathmandu as the crow flies, until the mid-1980s when a road was built within two days walking distance of Timling, the community could only be reached following a 4-5 day trek to Trisuli Bazaar, followed by a five hour road journey (Fricke 1993:34).

The peri-urban community of Sangila, a settlement cluster of 307 Tamang households, comprising a sample of 532 women, of whom 433 were ever-married and 99 never-married: "... was in contrast far more integrated into the web of relations characteristic of the rapidly developing areas of the country and may be taken to represent the other end of the spectrum" (Dahal & Fricke 1998:63).

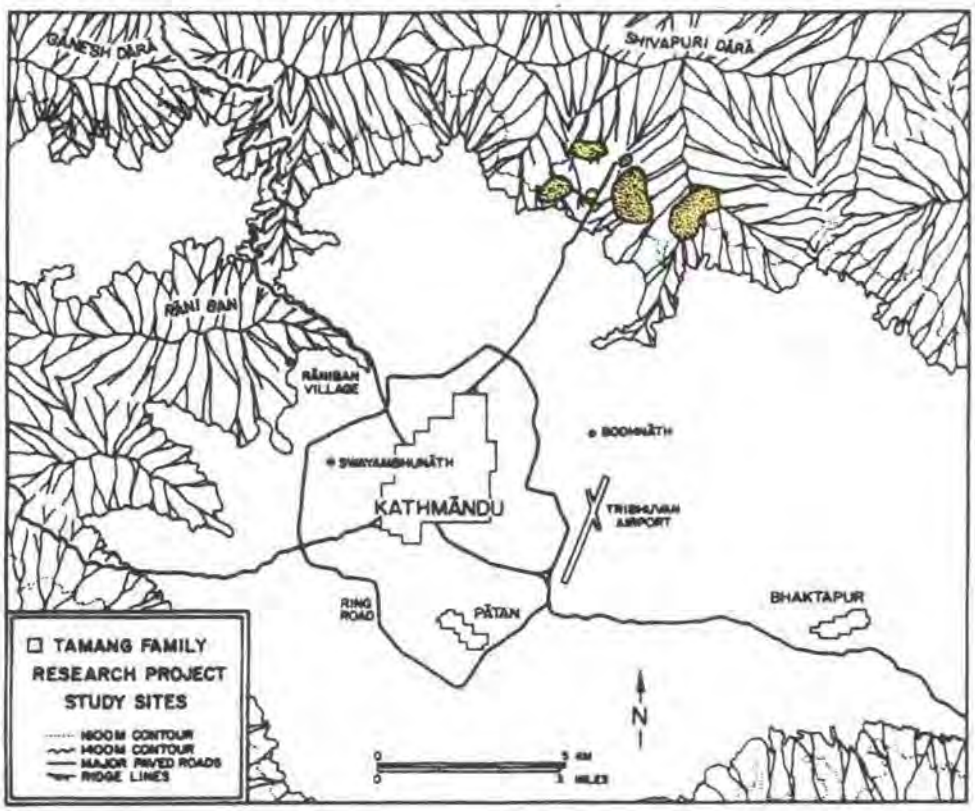

Figure 3.3: Map of the TFRP Sangila community cluster (from Fricke *et al.* 1990:286).

Sangila's close proximity (approximately 4 miles) to Kathmandu had been gradually enhanced by road development since the 1960s (Axinn 1992a: 506) and completion of a permanent, all-weather road in 1975 (Fricke *et al.* 1991:61), which is illustrated in figure 3.3. Although agriculture remains the primary mode of subsistence (Fricke, Thornton & Dahal 1990:287-88), over the years, there has been erosion of traditional ways of making a living. Administrative changes in landholdings following the collapse of Rana rule in 1951, together with conversion of traditional grazing pastures to conservation land within the Shivapuri Watershed Project, have dramatically decreased access to land (Fricke *et al.* 1991:61). During the 1980s, however, carpet factories became established around Sangila, which presented the community with local wage labour options, in addition to those in nearby Kathmandu (Axinn 1992a: 506). Further change has been stimulated by the introduction of development initiatives such as the Small Farmers Development Programme (SFDP). In addition to production and income-generation, the SFDP has also introduced family planning to the community in recent years.

By using the same basic questionnaire as Fricke *et al.* (adapted to local circumstances) I had the opportunity to collect some of my quantitative data in a format that would be highly comparable with that of other women in markedly differing socio-economic circumstances and proximity to motorised transport and urban centres. I subsequently developed the TFRP questionnaire for application to women in my own research area and began intensive training with the field assistants.

3.2.2 The study sample

Upon my return to the field in May 1990, following the popular revolution of the democratic movement in April, the situation in Attarpur VDC continued to be unsettled and agitated and it became increasingly difficult to maintain my distance from bitter feuds that had developed with political change. For reasons of security, I decided to concentrate my research on the largely Tamang villages of Turana and Samche in Jetthul VDC, where the political climate was much more temperate. In abandoning the Attarpur communities I sacrificed wider community coverage in my research, but became able to concentrate on a smaller research population that remained peaceful and did not weave me into political intrigue.

The Jetthul villages of Samche and Turana provided a good setting for the logistics involved in intensive ethnographic research. As figure 2.3 illustrates, the two villages are situated within a few hundred metres of each other, divided by a small and easily crossed stream. Although it

would have been desirable to research all women from the villages, as I discussed in the previous chapter in section 2.4.4, intolerance of close contact with the different caste groups prevented this. Had I spent time with the one *pane nachalne* (unclean) Kami woman, it would have been impossible to enter the 56 Tamang and nine Chetri homes. Similarly, passing adequate research time in the company of Tamang would have made my presence undesirable to Chetri women. As I was only able to maintain a working relationship with any one of the three ethnic groups close enough to obtain the ethnographic data required, the Tamang were the obvious choice.

While my qualitative research aimed to gain the broadest possible information on the villages and all their members regardless of age and gender, the main focus of this study were women of reproductive age, whose reported ages were between 14 and 45 years. Within the 56 Tamang households, 82 women gave their age to be within this bracket (although as I show in section 3.6 of this chapter, statistical testing indicated reported age to be inaccurate and required adjustments as set out in appendix II). Of these women, 54 had been or were currently married and their subsequently corrected ages were between 18 and 49. The other 28 women had never married and their corrected ages were 10 – 23 years. This focal sample of 82 women was somewhat small for the purposes of statistical analyses and would therefore be expected to restrict the range of viable tests that might be used. The sample size, when divided into necessary sub-units, was also expected to be insufficient to yield significant results for all but the most robust relationships between variables. As survey data were collected using the same questionnaire as the TFRP, however, these additional data presented the benefit of being highly comparable and extended the scope and interpretative capacity of the Jetthul data. Concentration of qualitative research upon the Tamang in two adjacent settlements also facilitated logistical practicality essential to detailed ethnographic study that yielded rich data concerning pertinent aspects of women's lives under investigation and the wider village dynamics impinging upon them. The primary research group of 82 Tamang women therefore provided an acceptable compromise between a larger number of women that would have enabled statistical analyses of quantitative data, and a smaller sample that facilitated detailed qualitative investigation.

Because it was not possible to incorporate women from all ethnic groups in this study, the sample cannot be regarded as representative of all women in the two villages. As my research also focuses upon a small number of women from a single *jat*, it cannot be regarded as representative of Nepalese women as Nepal is ethnically diverse. Furthermore, given that

Tamang identity, as I discuss in section 2.4.2, is highly flexible and the *jat* may even be considered to be an artificial unit, the small and discrete sample of women at the heart of this thesis are not assumed to be representative of Tamang women, other than those who live in Samche and Turana. By gathering detailed qualitative data from a relatively small, single *jat* sample, combined with quantitative surveying, this thesis aims to present a broad and in-depth situation analysis of Tamang women's lives in Jetthul. In this way it may be shown how a major development intervention such as road provision, impinges upon women's lives and, in particular, whether this has led to desirable social and economic changes linked with female development and fertility decline.

As the road was built several years before my arrival in Nepal, my study is inherently *post hoc*. This presents difficulties in attributing many aspects of socio-economic change to be direct impacts of road provision. Whereas long-term studies incorporating field research pre- and post-road construction can, by their nature, more confidently indicate change resulting from roads impact, *post hoc* studies lack initial base-line control data. While statistical analyses of quantitative data are useful in identifying robustly detectable change, given the small sub-sample sizes, this is not always the most reliable means of determining the road's impact. By far the most consistently informative material is obtained from detailed ethnographic data, especially as many features of women's lives are influenced by multiple and interdependent factors and cannot be attributed wholly to a single element or intervention such as road provision. While the road may be expected to exert a strong direct facilitating impact upon labour and marketing opportunities and mobility, for example, certain other aspects of female development that are closely linked with fertility decline are more subtle and complex and less easily attributed to single factors. Changes in female autonomy, education and use of family planning are three such issues explored in this thesis. These aspects of female development cannot be directly attributed to road development beyond the role of motorised transport in the provision and maintenance of essential infrastructure, such as buildings, staff and supplies. However, the movement of people between urban and rural areas is central to the theory of the diffusion of social change determining fertility decline (Bongaarts & Watkins 1996:669; Caldwell *et al.* 1988:55) and this is especially pertinent in Nepal (Caldwell 1998:2; Dahal & Fricke 1998:69; Niraula & Lawati 1998:170; UNFPA 1996:44; Axinn 1992a). Given rapid change in such areas of female development in urban areas over recent decades (CBS 1995:74;282), one may hypothesise that increased exchange between urban and rural areas facilitated by the Lamosangu-Jiri road, would be expected to accelerate the diffusion of values

raising female inclusion in school, the autonomy of women and increasing the demand for family planning. By using a combined qualitative and quantitative approach, I attempt to explore the indirect relationship between road provision and changes in female development that are linked with fertility decline, and thereby, address this gap in the literature.

3.3 Ethnographic enquiry

Ethnographic enquiry formed an important aspect of my approach to fieldwork in determining the impact of the road on social and economic aspects of female life and demographic change in Jetthul. Daily life was rich in opportunities for observing and informally gathering qualitative data. While I aimed to gain a wide ethnographic perspective, through observation and enquiry across a broad spectrum of the community, certain individuals with whom I developed a particular rapport became key informants. There were no restrictions preventing me entering Tamang households and I spent mornings in discussion with women while they sorted rice, prepared meals, cleaned the house and breast-fed their infants before going to the fields. Fortunately, some topics of prime interest to my research and upon which I focussed my ethnographic enquiry, were shared by Tamang women in Jetthul. Women loved to discuss their lot in life, the pain of childbirth, work, relatives, their health and that of their children. They were very easy informants and it was with great pleasure that I spent time in informal and structured discussion of women's life histories, views and experiences concerning marriage and the family, child rearing, education, life outside the village and labour opportunities. Informally gathered data, such as those obtained during morning visits, added depth and meaning to my quantitative data. By such methods, I came to learn of women's opinions, fears and desires. This was the material that enabled me to translate my quantitative survey data into the context of women's daily lives.

Plate 3.3: Sorting rice for the morning meal.

Initially, I relied on informal discussions without the use of a tape recorder or notebook, which I felt, would hamper the early stages of inquiry. As trust developed and my enquiry became

more focussed, I used both on the spot recording of field notes and to a less extent, tape-recording of discussions and informal interviews. The latter, although useful for accurate recording of discussion, often caused distractions, especially among children whose shouts were sometimes more audible on tape than women's conversation. The benefit of taped interviews was that I was able to listen to women's own words and where appropriate, directly use them in presenting this account of their lives. Whereas my role as a "measurer of children" encouraged a level of trust, the action of writing down and recording economic aspects of life, particularly concerning landholdings and cash generation, were regarded with deep suspicion and unease. I was repeatedly asked for assurance that I would not reveal my records of land ownership "to the government".

During periods spent in Kathmandu, I extended my qualitative research into aspects of urban life. I joined a martial arts club, which provided a justifiable arena for informal discussion with urban youth and proved enlightening as to the prevailing youth culture, including the role of the media in forming aspirations and views on life and love. To gain an impression of opportunities for, and conditions of unskilled labour in the city, I visited carpet factories around Boudha and informally interviewed traders associated with the tourist industry.

3.4 Quantitative data collection

The majority of data that form the quantitative backbone of this thesis were collected using Fricke's TFRP questionnaire (see section 2.3.1), which once adapted for application to women in Jetthul, was tested in a pilot study and refined in preparation for an intensive survey period. Trials with the adapted TFRP questionnaire, indicated that the survey interview would take around 40 minutes of each respondent's time. Like other anthropologists working with rural Nepalese communities, timing approaches to potential respondents was of concern as women tend to be working in the fields or busy with domestic duties (Miller 1990:35; Antweiler 1984:106). Pressing work schedules leave women very little time to spare and they become impatient to get on with the tasks in hand. Furthermore, women are sometimes absent from the village for days or even weeks at a time, staying with husbands working outside the village, visiting their *maiti ghar* (natal household) or staying in distant fields in movable cattle shelters called *goth.*[1]

In order to find a time when women were most likely to be at home and be able to set aside the

[1] During periods when cattle are stationed some distance from the village, one or more family members stay with the animals in the goths to tend and protect them. This is described further in chapter 4.

time required to complete a questionnaire, I planned the major quantitative data collection to take place in an intensive period of formal surveying leading up to the three week festival of *Dasain*.[2] In 1991 this was in October[3] and was good time of year to carry out a survey, for three main reasons:

1. *Dasain* is regarded by most Nepalese peoples, including the Tamang, as the most important and exciting festival of the year and people go to great lengths to ensure they are home with their families during this time. It is one of the best times of year to find most family members at home, as absent members of the community return to their natal villages from tending cattle in *goths* and from working outside the village.
2. As the festival is a time of fun and socialising, it was the most opportune time to find women willing to sit and talk in a relaxed mood.
3. With the monsoon over, the logistics of intensive formal surveying were simplified and there was a reduced risk of water damage to data sheets.

3.4.1 The formal survey

The TFRP questionnaire was originally designed, and further adapted to gather detailed data concerning women's reproductive and life history, including education, residential history, marriage, fertility, family planning, employment, experience outside the village, urban and media exposure. Questions were asked in a simple, yet specific manner. To provide a guide to the nature of questions women were asked, I have included examples throughout chapters 4 – 8.

The personal identification codes I assigned to all members of the community during the baseline survey at the outset of fieldwork, facilitated identification of all women of reproductive age for potential inclusion in the formal survey. Respondents' individual and household identifiers remained constant throughout field research, which enabled questionnaire data to be linked with data collected in earlier field research.

Although ethnographic enquiry incorporated a broad spectrum of the community, as my research focussed on the impact of the road on female life, I restricted application of the formal survey to women. The majority of questionnaires were conducted in women's own homes and the purpose of the study was explained briefly and simply as "wishing to know about your life history, about your family, work, going to school... etc." Questions were read out in Nepali or

[2] Some authors transliterate this as *Desai*.
[3] Each year, the date of the *Dasain* festival varies as it is determined by lunar and astrological means.

Tamang, according to respondents' preference, and further explanations were given when requested. Responses were recorded in writing by the trained, supervised field workers. As the questionnaire incorporated response codes, these were entered directly into individual record sheets for each respondent. The pre-coding of survey data facilitated simplification of data organisation and subsequent entry into computer files in preparation for analysis.

The survey procedure was by no means a smooth and simple process of question and answer. After the initial novelty of the exercise had diminished, many women became bored and restless. Certain areas of enquiry were met with inconsistent and evasive responses, when women would repeatedly ask why I wanted to know, or laugh in place of a response or completely fail to answer. Like other anthropologists working among the Tamang, I found enquiry concerning financial and economic matters was met with particular suspicion (Fricke 1993:57; Euler 1984:64).

Employment of the same basic questionnaire as the extensive TFRP, has effectively extended the scope and interpretation of my research in Jetthul, by facilitating direct comparisons with Tamang communities in another two distinct geographical and socio-economic settings and with widely differing proximity to urban centres and motorised transport.

3.5 Data treatment and analyses

All statistical analyses and charts presented in this thesis were carried out using *SPSS for Windows 6.1*. As a large body of data was collected from a relatively small number of women, the level of variability within the sample was expected to result in few significant outcomes of complex statistical tests. I therefore decided to keep quantitative analyses as simple as possible.

Because of the small number of women in the sample, I decided, where appropriate, to correct all percentages to the nearest whole value to provide the most meaningful figures for discussion. An exception to this, is where I make direct comparisons with TFRP data, in which case I present Jetthul data in the same format as the comparative data.

In order to assess changes in female life experience and reproductive behaviour since the advent of the road, I analysed and compared women by cohorts. To facilitate the most meaningful comparisons, the most appropriate cohorts were formed according to the aspect of female life under analysis. For example, in considering changes in female participation in

waged labour and experience outside the village, in the absence of obtaining reliable dates of events, I simply compared women who had ever married with those who had never married, as this grouping divides women broadly along age lines. For analyses more specific to fertility behaviour, which deal only with ever-married women, I was able to form cohorts according to whether women married before or after construction of the road.

3.6 Level of confidence in given age

As much of this thesis concerns itself with life events, age of individuals forms the basis of many analyses. It was therefore essential that there was the highest possible level of confidence in the age data of respondents. A feature of Tamang culture that is useful in testing and determining age is their use of a 12-year cyclical calendar. This is similar to Tibetan and Chinese calendars and those of other Tibeto-Burman groups in Nepal, such as the Gurung (Macfarlane 1976:281) and other Himalayan groups such as the Lepchas of Sikkim (Gorer 1984:175). In this system each of the 12 years or *lho*[T] of the cycle have an associated animal. The Tamang refer to their age by the animal year of their birth and the number of 12-year cycles or *lhokhor*[T] they have lived. According to Fricke (1993:53) Tamang knowledge of the animal year of their birth is highly consistent and accurate. Table 3.1 illustrates the Tamang age system, and includes the birth years of women who took part in the survey, together with their ages in 1991.

	0 ***lhokhor***		1 ***lhokhor***		2 ***lhokhor***		3 ***lhokhor***		4 ***lhokhor***	
lho	year	age	year	age	year	age	year	age	year	age
sheep	1991	0	1979	12	1967	24	1955	36	1943	48
horse	1990	1	1978	13	1966	25	1954	37	1942	49
snake	1989	2	1977	14	1965	26	1953	38	1941	50
dragon	1988	3	1976	15	1964	27	1952	39	1940	51
goat	1987	4	1975	16	1963	28	1951	40	1939	52
tiger	1986	5	1974	17	1962	29	1950	41	1938	53
bull	1985	6	1973	18	1961	30	1949	42	1937	54
mouse	1984	7	1972	19	1960	31	1948	43	1936	55
boar	1983	8	1971	20	1959	32	1947	44	1935	56
dog	1982	9	1970	21	1958	33	1946	45	1934	57
bird	1981	10	1969	22	1957	34	1945	46	1933	58
monkey	1980	11	1968	23	1956	35	1944	47	1932	59

Table 3.1: Tamang animal years *(lho)* with their corresponding European years for each cycle *(lhokhor)* and age in 1991.

At the outset of data collection when the census was taken, all the women in the study and members of their families were asked how old they were, together with the animal year of their birth *(lho)* and how many 12-year cycles (*lhokhor*) they had completed. Figure 3.4 illustrates the age distribution of the 82 women surveyed.

Clustering around the ages of 15 and 45 suggests that the youngest and older women in the sample might not have accurately reported their age. While aggregation around particular ages might arguably result from the small size of the Jetthul survey sample, large scale research has shown age heaping to be a common aspect of Asian surveys (Retherford & Alam 1985) and is apparent in Nepalese data (Retherford & Thapa 1998:11-13; Folmar 1992:237).

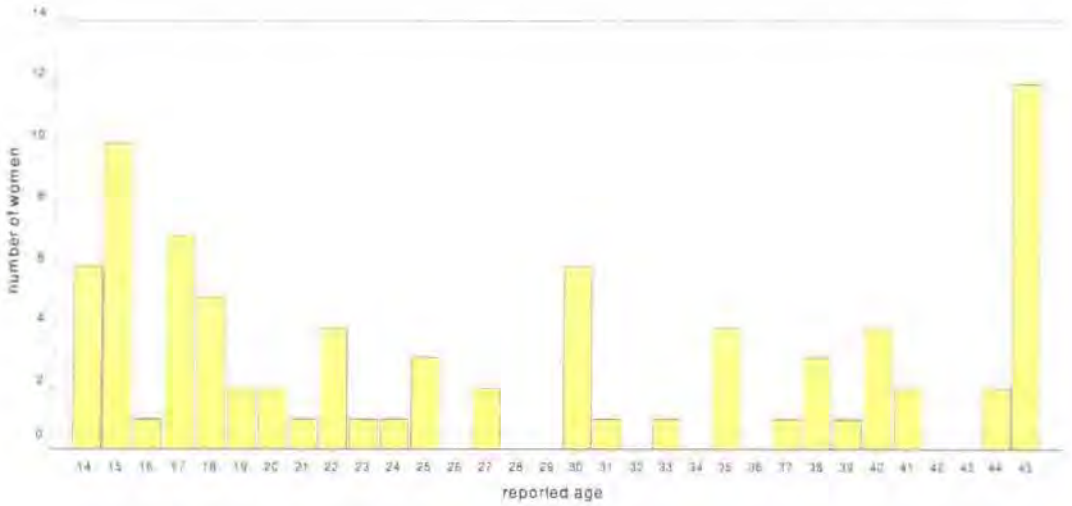

Figure 3.4: Histogram of women's reported age (N=82)

One problem in attempting to determine age in a rural community such as Jetthul, in the absence of vital data registration, is deciding how to weight the various age parameters in terms of their reliability. Like Fricke (1993:53), survey questions concerning animal year of birth *(lho)* yielded consistent and complete responses from the Jetthul community. Indeed, the level of response was exceptional, in that no one failed to answer or replied that they did not know the *lho* in which they were born. This was unlike most other questions, which generated at least a small proportion of "don't know" or "cannot remember" responses or complete failure to respond. I therefore gained a reasonable level of confidence that the Jetthul community, like the Tamang reported by Fricke, knew the animal year of their birth.

As the reported ages of only 44 women (54% of my total sample of 82) approximated their nearest possible age according to the animal year of their birth by +/- 1 year, it was clear that reported ages were unreliable. I therefore undertook closer analyses of women's age, assessed levels of disagreement between possible age according to animal year of birth and reported age and developed a method of age correction that I use throughout this thesis. These are set out in appendix II.

Chapter 4

Making a living: Labour, employment, commerce and subsistence

The global society is connected by trafficable roads along which trucks carry the goods that make the global economy possible and along which buses carry people seeking wage-paid work elsewhere.
J.C. Caldwell 1998:5

The economic organization of relatively self-sufficient agrarian communities turns almost wholly about the family, and the perpetuation of the family is the main guarantee of support and elemental security.
F.W. Notestine 1953:15

Nepal's persistent high fertility can be understood in the light of the economic fact that the cost of rearing a child is minimal compared to the child's contribution to the household.
J.M. Tuladhar 1989:10

I will be satisfied if everything I plant will grow.
Tuli Kanchi Tamang age 50

4.1 Introduction

In the past, opportunities for waged labour outside the agricultural and family domain have been limited in rural Nepal. The majority of subsistence farmers produced and traded to meet their consumption needs with a low use of cash, and for many communities this remains the case[1] (Cameron *et al.* 1998:17; Hoffpauir 1978:248). Produce from family-organised agro-pastoralism is traded locally for essential goods such as metal implements (for example, with the Kami caste of blacksmiths) and services such as ploughing (important to Hindu farmers whose religion prescribes avoidance of ploughing) offered by other occupational castes

[1] Average household cash expenditure in Nepal is estimated to be in the region of NR 300 - 350 per week (Cameron *et al.* 1998).

(Blaikie, Cameron & Seddon 1977:42). With a growing tourist industry, some industrial and commercial development, encouraged by improving communications, there has been a gradual broadening of employment opportunities throughout the last four decades in Nepal. Road building and improved communications have led to increasing monetisation in rural areas such as those surrounding the Lamosangu-Jiri road (Hamill *et al.* 2000:92) in addition to exposing communities to novel commodities and economic opportunities (Hayes 1993:102).

Completion of the local section of the Lamosangu-Jiri road in 1980 rapidly opened up communities in Jetthul to a new range of employment possibilities and entrepreneurial potential. In this chapter I examine the extent to which the road has impacted on women's working lives and their contribution to the household economy.

4.2 Objectives

In order to determine whether there has been detectable change in women's modes of production since the advent of the Lamosangu-Jiri road, my objectives were to:

- detail women's labour contribution to the household economy and assess whether this has expanded substantially beyond traditional subsistence agriculture and family-centred production;
- assess how far ways of making a living have changed since the advent of the Lamosangu-Jiri road near Jetthul and assess the level of agricultural development;
- quantify the degree of female participation in waged agricultural and non-agricultural employment both within and beyond the village sphere;
- investigate the extent to which women of Jetthul have taken up entrepreneurial and trade opportunities since the advent of the road and detail the nature and sphere of these activities;
- examine ways in which women's work has become monetised;
- determine how male involvement in the wider economy impinges upon women's employment options.

4.3 The agricultural situation

Men and women work in concert in household subsistence production. Apart from ploughing, which in Jetthul and other Tamang communities is a strictly male activity, (Fricke *et al.* 1991:31; Shrestha & Shrestha 1991:30; Panter-Brick 1987:33) there are no rigid prescriptions as to gendered aspects of agricultural activities. Many tasks are carried out by both sexes, although men and boys tend towards greater involvement in activities such as moving cattle and *goths* and terrace maintenance. Women and girls are more central to certain activities, such as

grain processing at harvest time, crop weeding and fuel wood and animal fodder collection. In Jetthul land is inherited through the male line and women effectively work on their parent's land before marriage and subsequently, their husband's family farm. It is usually only after a couple have established their family that a man may take a share of his parents' land to farm with his wife and children. Although Jetthul women who have no brothers may inherit land, the majority do not have their own land holdings. Some women own small livestock, which they are given as part of their *daijo* property by their parents at marriage (see section 2.4.4). While all family members work the household's land, kitchen gardens tend to be women's domain. Although much of the produce from small home plots is consumed by the household, women also exchange and trade small items as I show later in section 4.4.3. Control of any cash generated by the household varies according to the personality dynamics in individual households. In some, senior males may take charge of all money, but in others women keep the cash that they generate. During periods when men are working away from the village, women become responsible for a greater proportion of household agricultural production. Although major agricultural decisions tend to be made by men, this and many other aspects of farm and home life vary according to the personalities concerned. In some households men have greater involvement in cooking and childcare, and women take a greater part in major farming decisions.

For some years it has been recognised that labour has reached its full capacity in agrarian communities in Nepal and that yields cannot be further improved through additional labour intensification alone (Schroeder 1985). Pressure on land, fuelwood and fodder resources has led to environmental degradation in Jetthul similar to that apparent in many areas of Nepal (Mathema 1996:118; UNICEF 1992:29; Metz 1991:817; Antweiler 1984:101). The resulting deterioration of soil quality and tillability has, in itself, added to the labour input of farming (Blaikie & Coppard 1998:35). The concomitant structural instability of land has led to landslides in Jetthul, a situation that is becoming far from uncommon in rural Nepal (Pudasaini 1993:126; Miller 1990:66; Euler 1984:67; Hoffpauir 1978:246). As I set out in chapter 1, the Nepalese government and certain development agencies have invested heavily in rural roads development as a prerequisite to agricultural development. Provision of the Lamosangu-Jiri road was, therefore, expected to have a stimulating effect upon farming in Jetthul within the road corridor, by encouraging the adoption of novel inputs, techniques, cropping and marketing patterns (Basler & Hofman 1975:11). The agricultural situation in Jetthul, however, remains highly labour intensive for most of the year and subsistence agriculture is the primary mode of production. Overall there is little evidence of recent agricultural innovation, with no expansion

of crop varieties such as planting of fruit trees, and production techniques remain traditional.

Some chemical fertiliser was introduced into Turana and Samche a few years prior to my fieldwork, following government initiatives in the 1980s aimed at raising crop yields and decreasing dependence on labour-intensive livestock fertilisation. The outlay of over NR 200 per sack in the village, places this input beyond the financial means of many Jetthul households, and has prevented it being tested widely in the villages and incorporated into mainstream farming. The few farmers who were able to afford initial trials of manufactured fertilisers, in the long term found them too expensive and unsustainable. Land fertilisation continues using the traditional method of moving cattle to fields in temporary shelters called *goths* at the end of harvesting and mixing their dung, bedding and leaves into the soil by hand.

Plate 4.1: A Samche family staying in their *goth* to fertilise the fields after the rice harvest

This strategy is labour intensive as animals require feeding, watering, bedding and supervision to prevent them wandering into growing crops. In order to reduce the time expended travelling home each night (often this distance is several hours walk) and to protect cattle against predators,[2] one or more family members stay at the *goth* where they prepare food, eat and sleep.

Crop damage by wild animals and infestation by insects and disease is considerable in Jetthul. Wild boar raids on potato fields keep many farmers awake at night and birds and insects take their toll on grain yields. Storage of maize cobs under the eaves of dwellings and other grains in simple woven containers, provide little defence against further consumption by rats, mice

[2] One night in 1989, a Samche family's ox was killed by a mountain leopard. This was to prove a devastating loss as the family was unable to replace the beast. The financial implications were that the family could no longer plough their own fields and had to hire an ox. Income previously derived from ploughing others' fields was also lost.

and weevils, adding to the scale of food loss.

Plate 4.2: An illustration of insect spoilage of the maize crop

The majority of agricultural tasks are carried out using very simple traditional wood and metal tools such as sickles and hoes, made by the local Kami blacksmith. A water-powered mill had been built by one of the farmers who charges villagers in grain for processing their crops. Although the mill is small and simple, it dramatically reduces the time and energy input of cereal milling. As figure 2.1 illustrates, the situation of the mill on the stream running between Turana and Samche provides good access to both villages. All other agricultural tasks and crop processing are carried out using traditional methods that are labour and energy-intensive.

Land is categorised for use according to its altitude and irrigation. Some of the terms used by Jetthul farmers are similar to those of Tamang elsewhere, although the application of names to types of land use varies[3] (Panter-Brick 1987:17; Antweiler 1984; Euler 1984:70-71). In Jetthul, irrigated paddy fields at the lowest elevations are referred to as *khet* and used for cultivating wet rice. Small kitchen gardens in the village are referred to as *ghar* (meaning "home" or "village"). *Bari* fields are in the mid-altitude cropping range and as dry fields, are used for maize and millet. The highest cultivated land is referred to as *lekh*, where wheat, barley and potatoes are grown. Additionally scrubland called *pakho* is used for grazing cattle. Exploitation of this range of elevations and dispersed holdings by individual households adds to the energy and time cost of travel to work and moving *goths* and cattle to fertilise the fields.

[3] The term '*khet*' is used widely to describe irrigated fields (Blaikie & Coppard 1998:30; Regmi 1976:126; Caplan 1970:216). '*Bari*' is also commonly used when referring to unirrigated fields (Blaikie & Coppard 1998:31; Regmi 1976:126; Caplan 1970:13), although the term '*pakho*' is used by some communities in reference to dry arable land (Regmi 1976:127).

During my fieldwork, government agricultural extension services were apparent in Jetthul where, in common with many other rural communities in Nepal, a Junior Technical Assistant (JTA) was stationed. The JTA was a young Hindu man who had very little in common with, and no respect for the poorly educated Tamang community. The lack of rapport between the facilitator and farmers hindered dialogue and a clear understanding of the farmers' situation. Hampered by a lack of resources, the JTA became poorly motivated and carried out his tour of duty in Jetthul with resignation. The community experienced extreme disappointment following the initial expectations of agricultural assistance and improvements with the JTA's arrival. Although he was treated with respect, in the absence of effecting tangible progress, villagers believed him to have a hidden agenda and he was rumoured to be assessing landholdings for tax purposes.[4]

Depending upon the previous harvest, many households find their grain supplies running low in spring and early summer. Women and children can be particularly vulnerable during these periods, as they tend to serve food first to adult males. Some families are quite badly affected by food deficits and I became used to seeing young children with classic symptoms of protein-energy malnutrition, especially in the monsoon. In Jetthul the national dish of *dal-bhat* (rice and lentils) is taken after the rice harvest. Wheat, millet and maize form the base of meals at other times in the year, usually boiled in water to a thick porridge and eaten with beans, vegetables or meat cooked with oil and salt and some chillies. From the potato harvest in *Asar* (late June) through to the maize harvest in *Bhadau* (late August) the elongated, chestnut-flavoured potatoes become the sole staple at some hearths. In addition to the main grains and potatoes, a variety of other foods are grown, largely by the women, in their *ghar* plots. These include peas, beans, soya beans, onions, garlic, chilli, squashes, buckwheat, *iskuss*,[5] *mula*,[6] and *saag*.[7] Apart from one or two banana trees in the villages, fruit is not commonly grown or consumed in Jetthul.

Animal stockholdings are variable. Quantitative data concerning individual family livestock ownership are beyond the scope of this chapter, but have been presented for other Tamang communities in Sindhupalchowk (Antweiler 1984), Kabhre (Euler 1984:67) and Dhading (Fricke 1993:72). Households aspire to owning oxen for ploughing, one or two buffalo for

[4] Indeed, my own quantitative investigations concerning land ownership were met by similar suspicion.
[5] Grown on vines on fences surrounding houses, *iskuss* is a light green, pear-sized and shaped vegetable, with fibrous veins running throughout a soft matrix.
[6] *Mula* are large white radishes, popular throughout Nepal.
[7] *Saag* is a variety of broad-leaf mustard, eaten as a vegetable.

milk and breeding, a cow, one or more goats and some chickens. No sheep are farmed by Tamang in Jetthul, as in some other communities in Sindhupalchowk (Antweiler 1984:113) and elsewhere in Nepal (Campbell 1993:47; Fricke *et al.* 1991:31). Pressure on land over the years has brought pasture under cultivation and remaining grazing land is inadequate for sheep, which other Tamang communities use as a source of wool for clothing and trade (Campbell 1993:47; Fricke 1993:71). A few families rear a pig occasionally, like some other Tamang in east Nepal (Antweiler 1984:113), although they are not considered acceptable by other Tamang communities (Fricke 1993:72; Euler 1984:67).

Livestock are essential to the agricultural process as they provide the basis for maintaining the soil structure and fertilisation of the fields. The care and supervision of cattle away from the home involves one or more family members remaining with the *goth*. This disperses household members throughout certain times of the year, but does not result in the situation observed by Campbell in Rasuwa where:

> In terms of residence patterns the villagers are still fundamentally nomadic. To live on one site for most of the year is the exception rather than the rule (1993:55).

Plate 4.3: Men butchering a buffalo.

Men and boys tend to take greater involvement in larger livestock and *goths*, with more family members staying at times of intense soil fertilisation. Women and girls usually look after milking and small animal husbandry, such as chicken rearing at the home. Milk, *ghee*[8] and eggs provide a valuable addition to the household protein and energy intake and are also potential items for exchange, gifts or cash generation. Chickens and chicks are an important feature in Tamang ritual life and are necessary for sacrifice as part of the *jhankri's*[9] healing practice. Unlike some Tamang (Euler 1984:68), none of the households in Jetthul keep bees for honey.

[8] Butter oil.
[9] The local indigenous healer.

Meat is eaten irregularly in Jetthul. If an animal dies of natural causes, it is butchered and in the case of larger stock, the flesh and offal are shared with other households, usually on an exchange basis. The consumption of meat is an important aspect of Tamang ritual life, especially during marriage celebrations and festivals such as *Dasain*, when more substantial male goats and buffalo are ritually slaughtered. Sacrificial meat is eaten as part of the festivities, when it is usually abundant. Throughout the year, large animals are butchered in co-operation with many other local households, who make reciprocal arrangements or purchase meat. This is one aspect of food processing, which in common with many other Nepalese farming communities, is entirely conducted by men (Watkins 1996:49; Shrestha & Shrestha 1991:30; Panter-Brick 1987:33).

4.3.1 The farming cycle

To provide an impression of working life in subsistence agriculture in Jetthul, I set out my observations of the agricultural cycle during the year 1990-91. The following extract from my field notes is presented as a snapshot of agricultural activity. It is not intended as an exhaustive account of agricultural methods and land use, which have been described in detail for nearby Tamang communities in Sindhupalchowk and Kabhre (Antweiler 1984; Euler 1984). Months are written according to their colloquial, rather than classical forms.

Phagun (February-March). Animals were taken up to higher altitude *lekh* fields where some families stayed in goths with the cattle to fertilise the fields. Women and children collected fodder and dry leaves for the animals and firewood for cooking and warmth. Dung was mixed with leaves and spread over the fields. Land was ploughed, dug, levelled and potatoes planted. Beans were planted. Some house building was carried out by the men.

Plate 4.4: Men constructing a house in Turana in *Phagun*

Cait (March-April). Makai (maize) was planted in the prepared fields. Land was prepared for sowing rice. Women weeded the potato fields. Barley harvested.

Baisakh (April-May). Rice seed was sown by all available household members. Women weeded maize, wheat and potato fields. Second sowing of maize. Men ploughed millet fields in preparation for planting.

Jeth (May-June). Kodo (millet) was planted. Maize fields were weeded. Wheat and mustard harvested. Men repaired and renewed roofing. Intensive cutting of wood for fuel.

Asar (June-July). Rice seedlings were transplanted into the paddy fields. Maize and millet fields were weeded. Potatoes were harvested and dried for storage.

Saun (July-August). Wet monsoon weather. Weeded millet and rice.

Bhadau (August-September). Maize harvest commenced. Millet and rice fields weeded. *Saag* was planted by the women.

Asoj (September-October). Maize harvest completed. Fields cleared. *Bari* (wheat), barley and mustard sown.

Kartik (October-November). Rice was cut, bundled and the grain threshed by women hitting the heads of the bundles over wooden receptacles, later used to pound and de-husk it. Grains were winnowed by women using *nanglo*.[10] The remaining straw bundles were arranged in circular stacks. Marigold posies were placed on top of the completed stacks. Wheat fields were ploughed, fertilised by animals in mobile goths and the fields sown. Some house building and repair took place.

Plate 4.5: Men weaving *bhakari*.

Mangsir (November-December). The millet harvest was started. New goths were constructed from *bhakari* (woven bamboo sheets).

Pus (December-January). The millet harvest was completed. The harvested grains were processed, separating seeds from their tough casing. The maize fields were ploughed in preparation for sowing. Cattle were taken to pastureland to graze. Goths were moved from more distant fields to those nearer the villages. In addition to the daily fodder gathering, dry leaves for animal bedding were also gathered and transported to the goths. Some of the men wove *bhakari* for grain storage.

Magh (January-February). Potatoes were planted.

[10] Wide and shallow baskets, also used for sorting grains and pulses prior to cooking.

Plate 4.6: Women harvesting millet.

The calendar illustrates that in Jetthul, as in other Tamang hill communities (Fricke 1993:80) the annual agricultural cycle has periods of high intensity and a few months during the late monsoon and winter, when the weather dictates a lull in activity. In Jetthul, the months preceding the monsoon (which usually commenced in the second week of June) are both peak periods of agrarian activity and the lowest in terms of food availability and variety.

4.4 Female participation in agriculture

4.4.1 Unremunerated household subsistence farming

During the formal survey, when women were asked about the time in their lives when they first began different types of work, respondents experienced difficulty in estimating their ages at the time. This may have been because they began working from very young. Stronger quantitative responses were, however, obtained when women were asked about these activities in terms of their marital status at the time, which they found easier to recall. In the absence of direct ages for use in calculating the timing of female employment and entrepreneurial activities, marital status was used to create two cohorts for comparative analyses. Therefore, analyses of change over time focus upon cohorts according to whether women had ever married ('ever-married'), or never married ('never-married') in their lifetime. The cohort of ever-married women, comprises older women aged 18 - 49 (n=54) and the cohort of never-married women is younger, with an age range of 10 - 23 (n=28).

My quantitative survey of female working life confirmed my observations of women's central involvement in family-based, agricultural production. All 82 women reported that they had grown food for household consumption during their lifetime. All the ever-married women said they worked on their parent's farm prior to their first marriage and all women reported

engaging in household food production in the 12 months preceding the quantitative survey in October 1991.

Like many Tamang (Campbell 1993:162; Panter-Brick 1993; Fricke 1993:167; Antweiler 1984:102; Hall 1982:53;) and other rural communities in Nepal (Miller 1990:77; Messerschmidt 1981; Seddon, Blaikie & Cameron 1979:109; Macfarlane 1972:54; Caplan 1970:108) and elsewhere (Moore 1987:279) Jetthul farmers have a tradition of exchange labour. Working groups are formed to carry out agricultural tasks as determined by the seasonal cycle and needs of particular households and reciprocal *parma* working parties remain an important element of subsistence farming in Jetthul.

If the exchange of labour is between two households only, then all able-bodied members tend to participate. More commonly, *parma* arrangements are made between several households, in which case, each contribute fewer members to the working party, usually a woman or girl. In addition to working their own family land, therefore, women and girls in Jetthul are also most likely to represent their households in *parma* labour gangs. The valuable nature of human labour, together with the intensity of the agricultural schedule, means that careful accounts are kept of transactions between households to ensure that all receive labour equating to that given. *Parma* groups are most frequently formed during periods of intense agricultural activity, which enables tasks to be completed quickly, without hiring-in labour. These working parties also have the advantage of broadening the social dimension of the daily toil.

There is no evidence of the decline in *parma* activity reported in some other communities within the project area following construction of the Lamosangu-Jiri road (INFRAS 1991:183). Exchange labour remains crucial to the cash-poor Tamang agricultural economy as it allows augmentation of households' work forces without hiring in workers and potentially incurring debt. This traditional form of manpower exchange is vital in ongoing adaptations to increasing household manpower shortfalls and continuing reliance upon labour-intensive farming methods.

4.4.2 Waged agricultural labour

The Tamang of Jetthul are subsistence farmers, who in the past, engaged in a largely non-monetised economy. In addition to growing pressure on land and the need for households to address grain deficits, cash has become increasingly important with the rising consumerism generated by imported goods that are encouraged by road provision. The road, in linking

Jetthul with the wider country, has introduced manufactured and imported consumer goods that are sold at the road head and found in the village, a phenomenon that commonly follows road provision in rural Nepal (Seddon & Shrestha 1998:32). Items such as cigarettes, *chappals*,[11] Chinese textiles, thermos flasks, matches, biscuits, powdered milk, sugar, salt and *cetamol*[12] are now available in the shop at nearby Goli. Extreme deforestation around Jetthul has rendered fuel wood increasingly scarce and time-consuming to collect, and kerosene, transported into the area by road, has become a growing necessity in the area (INFRAS 1995:9). Because of the increasing monetisation and requirement for cash, I investigated whether there had been recent change towards wage labour both within the agricultural arena and in non-agricultural employment.

While *parma* arrangements are made by some households in response to periods of increased labour demand, on occasions additional manpower is hired in. Equally, the heterogeneity in landholdings and rented fields, livestock and wealth, lead some families to be extremely cash-poor. While many families discussed hiring–in labour in return for payment in cash or grain, throughout informal discussion and structured questioning, very few people spoke of being paid to do such work, particularly men. Indeed, women in Jetthul met my formal enquiries about participation in waged farm labour with some concern. Working for others in reciprocal arrangements or being hired to plough is considered respectable and casually discussed, but being hired to work others' land in the village is regarded as a demeaning sign of poverty.

Only six women (7% of the sample) admitted to ever participating in waged agricultural labour. Table 4.1 illustrates that all these were of the ever-married, older cohort. Two women said they had engaged in paid farm labour before they married and all six had done so since their first marriage. None of the younger cohort of never-married women admitted working on another household's farm for pay. All the women who reported ever participating in paid farm work, told me they had done so in the 12 months leading up to the survey. The total period during which women hired out their labour in the previous year ranged from two to nine weeks. As figure 4.1 shows, only one of the women reported working for more than four weeks in the year.

[11] Rubber thonged footwear.

[12] Paracetamol, one of the few western-style medicines available in Jetthul, is taken for many ailments beyond the prescriptive action of the compound.

	number	percent
ever-married – lifetime	6	11
ever-married – prior to first marriage	2	4
never-married	0	0
sample total	6	7

Table 4.1: Proportion of women ever engaged in waged agricultural labour.

Although declining opportunities for paid farm work in the hills (Cameron *et al.* 1998:19) may account for the low figures recorded, village talk and focussed ethnographic investigation suggest paid agricultural labour to be a much more common form of occasional income than my quantitative methods imply. Because Tamang in Jetthul and elsewhere (Campbell 1992:9,98,164; Toffin 1986:94) regard such employment to be demeaning, the majority of the women do not want to be associated with such a degrading activity, especially when a written record is being made. Other studies have shown, however, that Tamang women do engage in waged farm work, and that it forms an important part of some households' overall economic strategy (Campbell 1993:163; Fricke *et al.* 1991:69; IDS 1986:56; Acharaya & Bennett 1981: 230). The fact that women engage in income-generating activities they regard to be degrading reflects the acute level of poverty in some rural Tamang households. In conclusion, I regard my formal inquiries to have under-recorded the extent of female participation in waged farm work within the Jetthul communities, which due to the social stigma attached to such work, was not reliably quantifiable.

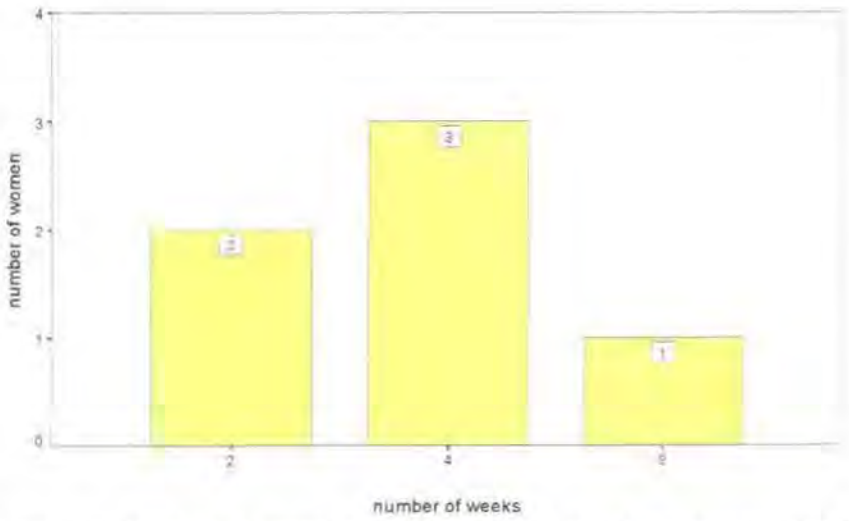

Figure 4.1: Duration of waged agricultural labour in the 12 months preceding October 1991.

4.4.3 Agricultural enterprise: produce sales

In common with other Tamang communities (IDS 1986:52), sale of agricultural produce tends to be delineated by gender in Jetthul. Substantial livestock and grain transactions tend to be conducted by men and sales of crops by women are largely confined to kitchen garden produce and smaller animal products such as eggs, milk and *ghee*. Most vegetable and animal produce is traded within and between nearby villages, and either exchanged for other foodstuffs and goods or sold for cash. Because very few households meet their consumption requirements, the majority of these transactions are small. Such local trading of foodstuffs forms an important source of cash income in Jetthul as it does for many other Tamang communities elsewhere in Nepal (Euler 1984:84; Pradhan & Bennett 1981:40), although market prices and returns remain low (INFRAS 1995:11; Blaikie *et al.* 1977:45). None of the female petty trade in farm produce is conducted using motorised transport provided by the road. Items exchanged, bought or sold, are transported by women on foot.

Apart from occasional animal and seasonal vegetable produce that is sold for cash locally, there is not an adequately substantial surplus in Jetthul to provide consistent supplies for larger markets accessible along the road. Milking cows and buffalo produce very low milk yields, due to their poor diet, genetic stock and management techniques. For the majority of farmers, milk production barely meets household requirements, although occasional gluts enable curd and *ghee* production for home use and local exchange and sales. No regular trade is conducted further afield either at Dandarpakhar or Lamosangu (shown in figure 1.1), as sporadic and small surpluses of milk products and perishable vegetables are inadequate to justify the investment in walking time to the road, the bus fare to markets and marketing time.

As I show throughout this chapter, the over-extension of the household labour force has increased the female work burden. This also obstructs women from taking advantage of possible new marketing opportunities presented by the road. Due to their heavy domestic, childcare and agricultural responsibilities, it is not viable for women to attempt to climb up to the road and spend long periods of time offering their limited surplus produce for sale there, especially since very few vehicles stop at the roadhead longer than to pick up and collect passengers. Indeed, the Jetthul roadhead is very poorly situated to make produce sales to road traffic. Located near well provisioned on-road vehicle stops at Dandarpakhar (12 km west) and larger market towns such as Barabise and Lamosangu (illustrated in figure 1.1), there are insufficient amenities or attractions at the roadhead to encourage vehicles to stop long enough for women to make sales. Because the local bus stop is simply a setting down and picking up

point, the road itself moves people past the village without pausing. There is therefore, little agricultural sales potential in passing traffic.

To gain a quantitative impression of patterns of trade throughout women's lives and the scale of female agricultural enterprise in Jetthul, the survey questionnaire asked, "*Have you ever raised crops or animals on a farm to sell?*" As discussed earlier in the chapter, the year of marriage was the most reliable marker of time during which work-related activities were conducted. I therefore asked women about their activities before and after their first marriage: "*Up to the time you were first married did you raise any animals or crops to sell?*" This provided information with which to assess the degree of change in female engagement in agricultural enterprise over time. Then to ascertain the current level of home-based enterprise, I asked structured questions about the nature of trade in the preceding 12 months. Table 4.2 lists women's responses.

	sold produce	
	number	percent
ever-married - in their entire life	18	33
ever-married - prior to first marriage	17	32
never-married	16	57
sample total	34	42

Table 4.2: Proportion of women who ever sold their own agricultural produce.

Of the 82 women surveyed, 34 (42%) reported selling agricultural produce they had cultivated in the village. Quantitative survey data show that women commenced small agricultural enterprise during their youth, prior to marriage, with all but one of the married women who had ever sold produce, trading prior to marriage. Among the older, ever-married women (n=54), a total of 18 had engaged in local sales of produce representing 33% of the older cohort. Of the pre-marital women (n=28), 16 had ever engaged in selling their own agricultural produce, representing 57% of the younger cohort. This indicates that a higher proportion of the younger women conduct small farm trade than their older counterparts did in their pre-marital years.

To gain an impression of the current situation of agricultural enterprise in Jetthul, women were asked about their activities in the 12 months preceding the survey.

	number	percent
ever-married	16	30
never-married	16	57
sample total	32	39

Table 4.3: Proportion of women who sold their own agricultural produce in the preceding 12 months.

Data set out in table 4.3 illustrate that equal numbers of younger, pre-marital women and older, ever-married women had sold their own agricultural produce during the year. This shows that the majority of older women who began trading agricultural products in their youth continued throughout their married life. In terms of the proportions of each group, 57% of young unmarried women engaged in small-scale agricultural enterprise in 1990-91, compared with only 30% of older, married women. The increase in local cash sales of farm and kitchen garden produce among the young generation of Jetthul women, compared with their older counterparts in their youth, reflects the greater level of monetisation of transactions in the community since the advent of the road. Provision of the Lamosangu-Jiri road has not, however, led the women to exploit new markets outside the village, unlike Tamang elsewhere (Campbell 1993:93,98).

4.5 Income generation outside the agricultural sphere

4.5.1 Female non-agricultural waged labour

Tourism, which has brought considerable and rapid economic change to some areas of Nepal, has not had a direct influence on job opportunities locally in Jetthul. While it has been estimated that some increase in tourism occurred in the region as a result of the road linking Kathmandu to Jiri, generating approximately NR 2 million per annum (INFRAS 1988:120), tourists make up no more than 5% of road users (Bajracharaya 1990:50). Turana and Samche are not located at the road-side or near any transit stopping points, sites of interest, white-water rafting rivers, trekking routes or tourist centres. Therefore, no additional opportunities for enterprise, labour or trade have been generated by road traffic at the village level. In fact, pre-road passing foot traffic, which involved the Jetthul community in long-distance portering and passing trade potential for food and *rakshi*[13] has been diminished by the road channelling traffic *past* rather than *through* the villages.

The survey revealed that overall, fewer than half the women (n=35) engaged in non-agricultural wage labour at some time in their lives. The same proportion of each cohort reported participating in waged employment: 43% of the older, ever-married group (n=23) both prior to

[13] Rice spirit alcohol.

and following marriage, and 43% (n=12) of the younger never-married cohort. This suggests no change in the proportion of women participating in non-agricultural work since construction of the road.

Between 1974 when earthworks for the road commenced, until completion of the local stretch of road in 1980, construction of the road provided local opportunities for men and women to engage in waged labour. Construction work offered the rare opportunity for respectable, fairly well paid work close to the villages that enabled villagers to return home at night, saving the expense of lodgings, often inherent in waged labour. Work on the road was also attractive as it gave labourers access to quantities of staple foods supplied by the World Food Programme (WFP) that could be purchased for half their market price (Schaffner 1987:3).

Of the surveyed women, 29 (35%) reported working on local construction of the Lamosangu-Jiri road. All the women who had engaged in road building were of the older, ever-married cohort, representing 54% of that group. As the stretch of road near Jetthul was completed by 1980, the women of the pre-marital cohort, aged between 10 and 23 in 1991, would have been too young to have been employed at that time, especially as project policy prohibited the employment of children under 16 years of age (Banskota 1997:3). Although taking up unskilled jobs on the road added a considerable additional strain to women who had ongoing child care, domestic and agricultural duties to maintain, such work was popular. It not only presented the opportunity for them to earn cash close to home, but access to subsidised WFP food staples also temporarily alleviated chronic food production shortages. As many of the men also took up labour opportunities on the road, rather than further afield, a greater proportion of their earnings were directed towards their households, rather than being diverted by expenses incurred in lodging outside the village. As men lived at home while working on the Lamosangu-Jiri road, there was also less leakage of their earnings into imported alcohol, gambling and women. While local construction work lasted, the labour opportunities it offered channelled cash directly into Jetthul households and eased production shortfalls by providing cut-price staples. Although no data were collected in Jetthul at the time, this would almost certainly have had a short-term positive effect upon the nutritional status of the community, as has been found in selected areas within the LJRP area (Sacherer 1990:38-39) and elsewhere in Nepal during the construction phase of local roads (Dunsmore 1987:45).

Due to the relaxation in cash and food shortages, together with the gradual increase in the availability of imported goods, there has been a rise in consumerism and dependence upon

manufactured goods such as filtered cigarettes. Since the construction phase of the road was concluded, however, no follow-up road maintenance labour has been available to the Jetthul community as contracts have come under the control of local contractors who offer jobs to relatives and neighbours in their own villages. Withdrawal of fairly-paid local labour and access to subsidised staples has left the community in the same situation of annual food production shortages, yet with expanded tastes and reliance upon imported consumer items that place an additional strain upon stretched cash resources. As a result, there has been a growing necessity for household members to seek wage labour outside the villages. The implications of this upon the agricultural labour force and women's lives in particular unfold throughout this chapter.

In addition to road construction providing opportunities for local work during the 1970s, two substantial industrial units, accessible via the Lamosangu-Jiri road, became operational during the 1980s. Two magnesite mines, funded by joint HMG/N and Indian private investment began trading under the name of the *Nepal Orind Mining Corporation*. The first is located at Lamosangu, near where the Lamosangu-Jiri road meets the Arniko Highway. The second, at Kharidhunga (shown in figure 1.1), just 2 km from the Jetthul villages, was constructed as a direct consequence of construction of the road (INFRAS 1988:101), which ensured transportation of supplies to the mine and the economic export of magnesite. This brought opportunities for seasonal and permanent employment to the immediate area. While the more distant plant at Lamosangu recruited very few local personnel (under 40), the mine at nearby Kharidhunga employed between 300 and 500 local unskilled workers, injecting an estimated NR 3.5 million into the local economy in wages (INFRAS 1991:160; INFRAS 1988:123). The Kharidhunga mine offered work to women, men and children at rates of NR 10, 12 and 7 per day respectively. During the trade dispute with India, between March 1989 and June 1990, however, magnesite export was halted and production declined. As a result the workforce was reduced and fewer jobs were available.

Although the mine was built as a direct result of the Lamosangu-Jiri road, it has not provided a major source of waged labour for Jetthul women. Only five (6% of those surveyed) reported ever taking up employment at the Kharidhunga mine since it became functional in 1980. Four of these were of the older, ever-married cohort and one of the younger, never-married group. In terms of proportions, this represents 7% of the older and almost 4% of the younger group. In addition to illustrating the low proportion of women who had ever taken up jobs at the mine, the survey revealed that none of the women had ever worked there for more than a month's

duration. As I go on to show in this chapter, the heavy subsistence and domestic labour burden falling on women prevents them taking up full-time work over substantial periods of time. This makes them less desirable as employees as they do not provide reliable long-term labour necessary to develop skills required by employers.

Portering, which Acharaya & Bennett (1984:43) describe as providing earnings for "bottom stratum" women, is traditionally characteristic of the Tamang (Panter-Brick 1987:32) and remains an important source of additional income in Jetthul and other Tamang communities (Campbell 1993:33; IDS 1986:5,46). Prior to construction of the Lamosangu-Jiri road, load-carrying was mostly long-distance and took days and even weeks to complete, which engendered absence from the village and a financial outlay for food and lodgings. It was therefore, not an ideal occasional occupation for women with small children to care for. The decline in human haulage as a consequence of road provision that has been reported in some areas of Nepal (Seddon & Shrestha 1998:33; Caplan 1997:623) is not evident in Jetthul. Although long-distance porterage has been replaced by motorised transport since the advent of the Lamosangu-Jiri road, portering remains an important means of income generation in Jetthul. A shift in the nature of portering requirements, similar to that observed in West Central Nepal by Blaikie *et al.* (1980:167-9,172), to short-duration, local movement of imported goods from the road to the village and of agricultural produce between villages has, in fact, been beneficial for women. It can now be engaged in more casually, without substantial time commitment and is more readily available during breaks and lulls in agricultural work, which fits in well with women's domestic and child care responsibilities. Hauling loads, although arduous, is regarded as respectable, and continues to be valued as a source of occasional income in Jetthul, especially by older married women with children.

The survey revealed that of the 35 women who reported working for cash at some point in their lives, portering is their most common income-generating activity, with 31 women (38% of the sample) having been paid for load-carrying. This quantitative evaluation, however, seems very low in light of my day-to-day observations of women's activities. My experience of female engagement in portering is that it is casually and informally taken up for short periods of time (i.e. by the load). Comparison of the younger and older cohorts indicates that there has been no substantial decline in female portering over time. Of the older, ever-married group, 39% (21 out of a total of 54) reported being paid to carry loads, compared with 36% (10 of the 28) of the younger, never-married cohort.

The high demand upon female labour by the household and its farm production is reflected in the survey findings that only two women have ever worked for a continuous duration of a month or more in non-agricultural labour. While the two women differ in their ages and marital status, they share the same characteristic of relatively low domestic responsibility, compared with women living in extended family households. Phul Maya Tamang,[14] is aged 35, married and lives with her husband and two sons aged six and nine. Although her husband occasionally migrates to the Terai to engage in waged construction labour during slack agricultural periods, for the majority of the year, he lives in the family home in Jetthul. Her husband's presence in the village for much of the year allows them to work their land together with their sons during the months of intensive agricultural activity. Living in a nuclear household, the couple do not have elderly parents or other potentially less productive relatives to support or care for. Although their sons are young, they are relatively self-reliant and do not demand parental supervision throughout the day. In fact, the boys have integral roles in household production such as the daily care of home-based livestock, staying with cattle in the family goth at certain times of year and assisting their parents in the fields. As local labour on the Lamosangu-Jiri road was available prior to the birth of her children, when her agricultural duties allowed, Phul Maya was able to work on the project for periods of several weeks at a time. Her work on the road was unskilled - she made tea and worked as a labourer – and so she did not develop her skill base. Since the completion of the road, Phul Maya has worked for cash in local agricultural labour and reported earning a total of NR 800 in the 12 months preceding the survey. While some women living with their parents, and particularly those living with their parents-in-law are expected to surrender their earnings to the general household fund, as mistress of her own household, Phul Maya is free to keep all the cash she earns. Although she spends some of her earnings on general household items, she regards this money as her own, which provides a great incentive to earn more. While she is aware that other women regard her as demeaning herself working others' land for cash, she is a spirited woman who brushes aside the stigma associated with this income-generating activity: "I don't worry about what they say. I can buy [manufactured] cigarettes when I want."

The second woman who reported working for a periods of month or more was less forthcoming about her wage earning activities and her feelings about them. Kanchi Tamang[15] is unmarried, aged 18 years and lives with her mother and younger sister. Her total cash income in the 12 months up to October 1991, she estimated to be a substantial 1,500 roupees. Although in the

[14] A pseudonym.
[15] A pseudonym.

survey, she reported working for cash outside the agricultural arena, she would not be drawn into discussion about her wage earning activities. The low regard of waged agricultural labour prevalent in Tamang society (which I discussed earlier in this chapter) may well account for Kanchi's reluctance to disclose the source of her earnings. Given the literature concerning the Tamang, prostitution and road provision, however, her refusal to discuss the source of her substantial cash income requires further consideration.

As I set out in section 2.4.4, Tamang women are particularly targeted by procurers of commercial sex workers. This has led to Sindhupalchowk District, in which Jetthul is situated, being one of the main recruitment districts in Nepal for sex workers (Newar 1998; UNICEF 1992:109; Thapa 1989b:173). The indebtedness and poverty of many Tamang communities have been cited as major determinants of their vulnerability to sexual exploitation (Pradhan 1994:37). This is compounded by a lack of local cash-earning opportunities (Seddon 1998:41), a situation much in evidence in the Jetthul area. This was highlighted in an informal discussion with 37 year old Serpini Tamang:

KM: Some people work for money sometimes. Have you ever worked and been paid in cash?
ST: Here there is nothing for earning money.

As I set out in section1.3, in parts of rural Nepal the advent of motorable roads and subsequent increased human movement is associated with the rising demand for commercial sex. Lodges and teashops arising along newly constructed roads, especially near bus and truck stops, are implicated as entry points into prostitution within the local area (Seddon 1998:40; Shtrii Shakti 1995:72). These factors combine to render Jetthul women particularly exposed to the increasing demand for commercial sex since provision of the Lamosangu-Jiri road.

Although some of the women, like Kanchi, resisted disclosing the source of their cash income, I found no grounds to suspect that they engaged in prostitution, even though I was aware of its occurrence in nearby Tamang communities, and in rural Rasuwa as reported by Campbell (1997:220) in times of economic hardship. Unstructured interviews and monitoring of circulating gossip at no time during my fieldwork suggested the engagement of any Jetthul woman in casual or more frequent prostitution locally, or of women being trafficked further afield for this purpose.

Moreover, the procurement of women for commercial sex work is highly organised in Nepal and emerging patterns concerning the nature recruitment in rural areas are not in evidence in

Jetthul. Once links have been established in a particular village, agents tend to continue to procure numbers of eligible girls and women there, sometimes over a period of years (Newar 1998; Pradhan 1994:35-37). The scale of female export to brothels both within and outside Nepal is such that a substantial proportion of young women is then absent from the village. In addition to this demographic feature of organised female sexual exploitation, at the village level, engagement in prostitution is also apparent in the sudden increase in the visible affluence of households whose daughters are away:

> You see a house with a tin roof (a sign of affluence compared to thatched roofs) in a Nepal village and you know the daughter works in a Mumbai brothel. (Chatterjee 1997)

The pattern of procurement on a targeted village basis has led to the exploitation of women (particularly Tamang), becoming an integral part of local economies, as the following account illustrates:

> Chop Bahadur Tamang, who lived in extreme poverty at one time, has become one of the wealthiest and most influential men in [his] village... He owes his turn of material fortune to one of his four daughters who has been working in a Mumbai brothel for 14 years. ... In some places in Sindhupalchowk district, local money lenders prefer to give loans to couples who have at least one daughter working in Indian brothels. (Gajurel 1997).

The census I maintained during my Jetthul fieldwork did not reveal 'missing' girls and young women. Indeed, as I go on to show in the next chapter, Jetthul women have a relatively low exposure to life outside Jetthul compared to their male counterparts, and female residence outside the village is limited. Furthermore, there was no evidence of any households having become markedly more affluent in recent years. Given the sexually permissive nature of Tamang society, lack of privacy and interest in others' material goods, gossip, together with my ongoing investigations and observations of village life, it is safe to assume that if any of the women had engaged in prostitution, I would have become aware of it.

4.5.2 Female non-agricultural enterprise

Of the buildings that arose at the Jetthul roadhead, following construction of the Lamosangu-Jiri road, one was a shop that serves villagers from the surrounding area that pass by each time they use motorised transport or walk along the road. The shop stocks imported goods from China, India and other areas of Nepal, and apart from mustard seed oil, no local agricultural produce is sold. Even the ghee for sale in the shop is tinned and imported from India.

After plans to construct the road became public, land prices rose steeply, as has occurred elsewhere in Nepal (Seddon & Shrestha 1998:32; Banskota 1997:3; Caplan 1997:619-21).

Relocation from Samche and Turana to the roadside, which has become better situated for economic diversification since road provision, is beyond the means of impoverished Tamang families. The shop is owned and run by an incoming family of the merchant *jat* of Newars, who had the necessary retail experience and capital to set up in Goli, unlike the local Tamang. That an outside family exploited the economic niche created at the roadhead by the advent of the road is not an uncommon phenomenon in rural Nepal (Shepherd 1989:576). In Jetthul, it not only represents a failed opportunity for poor local farmers to diversify, but exploits the poor who have become dependant upon imported consumables and thus places a greater burden on household economies. Caplan (1997:620) cites such economic changes following road construction in areas of rural Nepal as "... exacerbating an already precarious economic situation..."

The effect of the road on reducing the transport costs and price of certain imported goods has contributed to diminishing sales of female crafts such as wool spinning and weaving in Jetthul. While this is due in part to the reduction in available pastureland for sheep farming in recent years, the importation of Chinese and Indian textiles along the road to the shop has depressed the demand for traditional textiles. These imported goods not only retail at highly competitive prices, but are regarded to be of superior quality, more durable, modern and attractive than homespun materials, and are therefore more desirable.

Although the local IHDP, based in Dandarpakhar, initiated a project to stimulate cottage industry and small enterprise in the area during the 1980s, there is no evidence of the success of this initiative in Jetthul. Furthermore, it has been reported to have made no significant impact on income generation in the project area as a whole (INFRAS 1991:161; INFRAS 1987:122). None of the villagers reported contact from other skills development projects or receiving loans or training for the development of cottage industry that are crucial to small business development among women of underprivileged communities (Shtrii Shakti 1995). Neither PCRW, WDP nor other projects providing loans and support of female enterprise had been initiated in Turana and Samche. Overall, there has been no effective project intervention to counteract the diminishing impact of road provision upon local female income-generation from traditional textile production.

Brewing and distilling, the traditional small enterprise of Tamang women continues although sales of *chang*[16] and *rakshi* remain within the village sphere. The reduction in the volume of

[16] Millet beer.

foot traffic passing through the villages since construction of the road has, however, led to a decline in occasional sales to visitors. Some wealthier women also generate a small income from interest on small personal loans. Unlike Tamang elsewhere (Campbell 1993:67; Fricke *et al.* 1991:54) and other Nepalese hill groups (Watkins 1996:63), there is no collection and marketing of wild plants for medicinal or significant food use. This may be due to the general degradation of local forests and decline in species over recent years. In Jetthul, the only wild foods collected are berries picked by children, who eat them on site.

The lack of female enterprise development following provision of the Lamosangu-Jiri road is also a factor of geographical location. As Samche and Turana are not located near any trekking routes or sites of tourist interest, there is no requirement for lodges and teashops that in tourist areas offer the opportunity for women to generate income within the household (Shtrii Shakti 1995:71), which allows them to combine domestic and childcare responsibilities with income generating activities.

4.5.3 Male non-agricultural labour and enterprise

While quantitative assessment of men did not form part of my fieldwork, qualitative investigation was made of male economic activities affecting household income and the resident labour force. Although the women of Jetthul have not markedly taken up entrepreneurial and wage opportunities outside the village, ethnographic enquiry revealed that men involve themselves in much broader income-generating ventures in a wider geographical sphere. The shrinkage of the distance between Jetthul and centres of tourism resulting from road provision has encouraged some entrepreneurs to meet rising demand for traditional crafts and many of the older men are learning crafts from village masters, which they produce for sale to tourists. *Thanka* paintings, woven bamboo mats and 'antiqued' carved wooden masks are crafted by men resident in the villages, which the young men take to Kathmandu for sale. This has become an increasingly common form of additional income in Jetthul since the advent of the Lamosangu-Jiri road, which enables cheap and easy transportation of crafts and facilitates their distribution and eventual sale.

In many households one or more of the males participate in waged employment outside the village. Locally, the magnesite mine at Kharidhunga is a popular destination for seasonal work, when jobs are available, and some casual labour is occasionally taken up in Dandarpakhar. Some men also engage in construction work as far away as the Terai, with Bharatpur, Tanahu and Bara being the main sites where Jetthul men have contacts for such

work. Although Jetthul men have migrated to the Terai for work for many years, since construction of the Lamosangu-Jiri road, the cost and duration of journey has been reduced, encouraging more men to take up work there (INFRAS 1995:20-24). Although some of the village men have worked in India in the past, no one from Turana or Samche was working in foreign countries during my fieldwork. The decline in Jetthul men working outside Nepal is initially counter-intuitive, considering the increasing employment of Nepalese workers in foreign countries in recent decades (Seddon *et al.* 1998:4). This reflects the lack of village contacts necessary to obtain gainful positions in east Asian and Gulf states as much as the uptake of developing domestic opportunities in urban areas (UNDP 1998:173; CBS 1995:41) encouraged by road provision. Of greatest significance is the escalation in international employment brokers recruiting agent's fees, which are reported to be in the region of NR 30-80,000 (Seddon *et al.* 1998:7). This further illustrates how those most in need of improvements in their livelihoods often have least access to means of so doing (Cameron 1998:13).

Plate 4.7: Carving a mask destined for the tourist market in Kathmandu

Plate 4.8: A man taking *bhakari* for sale

Many of the young pre-marital men live for the greater part of the year in Kathmandu where they work in the growing tourist industry. Some sell crafts made in Jetthul to tourist shops, and others work as porters and sirdars for trekking parties. Even though some of the young Jetthul men, like other Tamang youths, are using their portering skills in the more lucrative trekking

industry where they can earn in excess of NR 100 per day in addition to gifts and tips, family members remaining in the village often fail to benefit. The cost of living in urban centres, together with the lure of novel consumables deplete cash earnings, leading to a situation where even the higher paid men save very little cash for the rural household economy (Campbell 1997:227; Miller 1990:66; Euler 1984:85).

Other men have more lowly positions as *peons*[17] and *chowkidars*.[18] All male work outside the village is characterised as being unskilled and poorly remunerated. None of the Jetthul men are employed by foreign or domestic armies, or receive incomes from army pensions, unlike those of the TFRP (as I show in section 4.7.2 of this chapter) and in Tamang communities elsewhere in Nepal (Campbell 1997:224-5; IDS 1986.46).

The duration of male absence from the village is highly variable. For the greater part of the year, male youth is conspicuous by its absence from the villages. At *Dasain* and times of peak agricultural activity (for example, during the rice harvest in *Kartik*) the young bloods return sporting leather jackets, dark glasses and an air of urban sophistication. Those involved in construction work on the Terai are also away for long periods, due to the distance and duration of construction and transport costs. Others are absent for just a few weeks at a time. During male absence, the slack created in household manpower for agricultural production has to be taken up by the remaining members. This leads to an increased work burden for the elderly, women and girls and decreases their educational and employment options.

4.6 Women's cash earnings

Quantitative data concerning the labour and cash income in Jetthul are the most contradictory of the whole study. For example, the annual cash earnings women declared, together with the reported duration and nature of their work, implied unusually high rates of pay for the time period and location. As I have already stated, many women also evaded discussing the nature of work by which they had generated cash. While there was no evidence to suggest engagement in prostitution, as I discussed earlier in this chapter, this may have been due to a combination of several other factors. While women were forthcoming about working for cash in exchange for 'respectable' labour such as portering, mine and construction labour, there was a great avoidance of reporting paid agricultural work in the survey. Ethnographic enquiry revealed that many women resort to occasionally working others land for cash, although it is

[17] Office messenger.
[18] Night watchman.

regarded as shameful and few women openly admit to it. Given the suspicion of motives of officials and outsiders in Jetthul and that responses to formal questions concerning work and income were being recorded, women were reluctant to respond openly to this section of the survey. Additionally, it is not always politic for women to disclose their actual earnings within the hearing of other family members, in-laws and neighbours.

Earnings reported for the 12 months preceding October 1991 by 31 of the women (illustrated in figure 4.2 and table 4.4) were quite variable. This is indicated by the standard deviation of 482.28, and range of annual income from NR 20 to 2,000. The mean earnings in the 12 months preceding the survey was NR 503.23, but given the range and variation in generated cash, the median value of NR 280 provides a more useful indication of the central tendency of the distribution.

Figure 4.2: Cash income reported for the whole sample in the preceding 12 months.

The reduction in sample size, when divided into cohorts, precluded testing for statistical significance in differences between the earnings of the older and younger women. A simple breakdown of annual earnings by cohort, however, indicates some interesting patterns. Table 4.4 illustrates markedly higher annual cash income among the younger, pre-marital women, indicated by both the cohort mean and median. The standard deviation of the two cohorts reflects the higher level of variation within the smaller, younger group. Although the number of women in the pre-marital cohort is small, it is worthy of note that at the lower end of the cash earning spectrum, only 50% of the younger cohort earned under NR 400 in the preceding 12 months, compared with 74% of the older cohort. At the upper end of the distribution, 25% of the younger women who declared their earnings had an income in excess of NR 1,000

compared with 12% of the older cohort. This greater cash generation of the younger women reflects the response of the younger generation to rising monetisation and consumerism that has occurred in the area since construction of the road (INFRAS 1995:27).

cash income	ever-married (n=54)	never-married (n=28)	sample total
range	80 - 2,000	20 - 1,500	2 - 2,000
mean	467.8	605	503.23
s.d.	446.67	594.81	482.28
median	280	500	280

Table 4.4: The breakdown of cash income during the year 1990-91, by marital cohort.

4.7 Domestic labour

Productive labour forms only a part of women's working lives in Jetthul. While Tamang men sometimes participate in domestic activities, for the majority of households this is women's work. Food preparation and managing the home and children, adds a considerable additional burden on women's time and energy and binds them to the home.

A recent innovation that reached the villages in Jetthul as part of the Lamosangu-Jiri road development, in association with IHDP and UNICEF, was the installation of polythene piping supplying spring water to several locations in both villages in 1988. The majority of dwellings are now within 15 minutes walk of a water source. This has not only enhanced the quality of drinking water throughout the year, but improved access dramatically reduces the time and energy demand of supplying household water requirements on the part of women and girls. Even with the improved access to clean water, however, supplying domestic water requirements adds considerably to female time and energy expenditure. As a consequence the domestic water supply is used sparingly.

The drudgery involved in water haulage is illustrated by the following excerpt of a taped informal interview with Dolmo Tamang, a 22 year old married woman living in her husband's parents' household:

KM: How long does it take to walk to the water pipe from your house?
DT: Thirty minutes.
KM: Thirty minutes from here to the water pipe?
DT: Thirty minutes going and coming.
KM: And how many times each day do you go there to fetch water?
DT: In the morning, three or four times to fetch water for the animals. Then at night time again, another three or four times.
KM: Do you fetch all the water for your household, or does someone help you?
DT: I fetch it myself. No one helps me.

Dolmo's account illustrates the situation of many women in Jetthul, for whom water haulage takes between three and four hours each day.

Although the time and energy cost of obtaining water has been reduced, female tasks of firewood and animal fodder gathering have become more difficult and protracted over the years, due to rapid local deforestation that occurred in the 1960s (INFRAS 1995:8). Increasing agricultural encroachment on forests has led to extreme deforestation around Turana and Samche. The severity of the ecological imbalance was highlighted in the monsoon of 1989 when a landslide buried and killed a man from Turana who was working on his terraces.

Plate 4.9: Fetching water

Families traditionally rely upon wood for daily cooking and heating homes and *goths* during cold nights. Leaves and other forest products are also vital for feeding and bedding animal stationed at the *goths* and in home cattle sheds. Over the years, the time required to gather these resources for household needs has increased as women are forced to travel further afield to gather from sparse reserves. In order to collect a *doko*[19] of firewood or fodder, women need to walk for about three hours, a distance not uncommon in Sindhupalchowk (IDS 1986:6).

Some afforestation was carried out as part of the IHDP in the decade preceding my fieldwork (INFRAS 1991:A-19), with tree planting close to the road at Goli in 1989 (INFRAS 1995a:39). Although not planted for the purpose of providing firewood, some of the Jetthul women make occasional covert forays there and cut wood from the young trees in the plantation, as the following extract from my interview with Soma Tamang illustrates:

KM: Here in Jetthul there are not so many trees for cutting wood. Where do you find wood?
ST: (laughs) I go to Goli.
KM: To Goli?
ST: ...I steal it!

[19] A large basket carried on the back using a strap around the forehead.

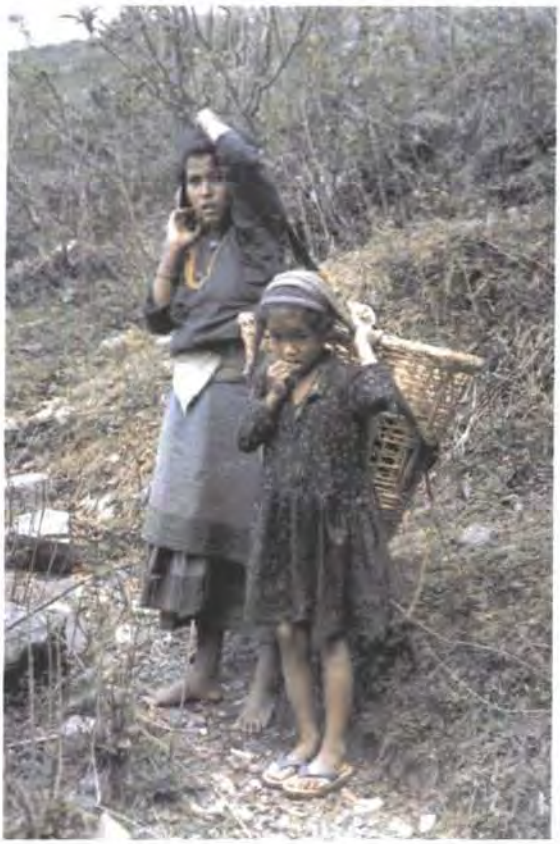

Plate 4.10: Mother and daughter on their way to collect fodder

Plate 4.11: Returning home with a *doko* of firewood

The task of obtaining adequate fodder and fuel wood that falls mostly on women and girls is extremely arduous and time consuming. Although women sometimes walk along parts of the road during their search for fodder and firewood, apart from the IHDP tree planting, the road has had very little impact in alleviating the female burden of gathering and transporting forest materials. This is an important feature of female transport responsibilities that has been noted to be highly time and energy consuming (Fernando 1997b:2; Philpott 1994:40; Urasa 1990:26), which depletes women's productive capacity (Jennings 1992:29).

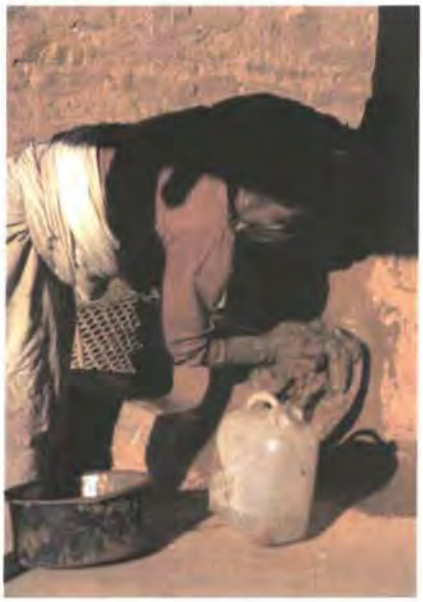

Plate 4.12: Renewing the *lipnu* floor.

In addition to the daily round of domestic and agricultural duties, women in Jetthul have other occasional domestic tasks to juggle such as making and washing clothes and renewing the *lipnu* floor of the house. This involves gathering dung and mixing it with

red earth and water to make a paste that is then applied with a bare hand to the entire ground floor of the house and the smoothed surface left to dry. The overall workload of women and girls in Jetthul is characterised as highly labour-intensive on a daily basis, with seasonal variation in activity.

Having described the hard working lives of women in Jetthul, I must stress that women do not carry the demeanour of drudgery; Tamang women have a wry sense of humour, adore gossip and when working in *parma* groups enjoy companionship and society from outside the immediate family. Breaks in the working day, sitting at *chautaras*[20] between villages and walking to and from the fields affords the opportunity to share a smoke[21] and a laugh.

A snapshot of female domestic activities and how they are fitted into working life is provided by the following extract from my field notes. It is an account of one day's activities of a woman and her children in a household in Turana. These field notes incorporate my own observations together with a description of the early part of the day recounted to me by Pema Tamang.[22] Pema, aged 30, lived with her husband and three children. On the day I made these observations, Pema's husband was away from home in the *goth*.

> Pema woke about four in the morning, when it was still dark and cold. She lit a small kerosene lamp and roused the embers in the hearth by blowing deep lung-fulls of air down a pipe into the fire. Having revived the flames with the addition of twigs and sticks, she woke her daughter Suntali, aged six. Suntali helped feed the cow, goats and chickens in the cattle shed next to the house and Pema milked the cow. Mother and daughter then hauled water for the animals in three round trips to the water pipe, each journey taking 15 minutes each way.
>
> For breakfast Pema made tea and popped maize in a little oil. The tea together with *chang* and *rakshi* were drunk around the fire and the maize eaten by her older son Tilak, aged eight. Pema and Suntali ate their popped maize as they prepared the first of the day's two main meals.
>
> Suntali is sent to the water pipe with a large brass pot on her hip. At the water pipe, she fills the pot and hauls the water back to the house for her mother to boil the rice and beans.
>
> In her absence, her mother has cleared away bedding, the breakfast tea-glasses and swept the floor of the house. They both cut up vegetables to accompany the meal and some onion, eaten as *achar*.[22]
>
> After the meal has been served mid-morning, Pema places her sickle and some popped maize in her *ke*$^{\text{T}}$, takes her *doko* and sets off for the fields were she will weed maize. Tilak sets out with supplies of food for his father at the family *goth* one and a half hour's walk away, where he will remain for the next few days, helping his father move the cattle.

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[20] Rest places between villages, usually comprising some stone ledges and a shade tree.

[21] The majority of tobacco smoked in Jetthul is in the form of manufactured filter-tipped cigarettes that have become more widely available in the area since the advent of the road. Women tend to buy them a few sticks at a time from the shop at the roadhead.

[22] A pseudonym.

Plate 4.13: Suntali taking her baby brother to be fed by their mother

Suntali places *Chang-ba*,[14] her two month old brother, in a small basket that she carries on her back with a strap placed over her forehead. She takes the cooking and eating utensils to the water-pipe where she rinses them clean and scrubs the cooking pot with ash and water. She looks after her young brother while her mother works in the fields and during the day carries him to her mother to be breast-fed.

At dusk, around six in the evening, Pema returns home with her *doko* full of leaves and grass for animal fodder and bedding. Pema breast-feeds her infant before attending to the goats and chickens. Mother and daughter haul water pots to and from the water pipe for a total of four trips. The animals are fed, watered and some of the new bedding placed in the stall. Suntali helps her mother prepare the evening meal and cleans the dishes when they have eaten. Pema talks to her children before they all fall asleep around the fire about 9pm.

(Field notes 21 May 1990).

My field notes recording Pema and her daughter Suntali's day illustrate how women and girls together manage to integrate the intensive domestic and agricultural work schedule. Childcare and domestic labour in the home carried out by six year old Suntali was essential to free her mother for productive labour in the fields. While Suntali made a vital contribution to the economic functioning of her household, her day was fully committed, leaving no time potential for school attendance or play.

4.8 Comparison with the Tamang Family Research Project

In this section findings from the Jetthul community are compared with matching data generated by Fricke, Dahal, Thornton, Axinn and Rimal's (1991) Tamang Family Research Project (TFRP). As I set out in section 3.2.1, TFRP data were collected using the same basic survey questionnaire as my own. This provides a broader Tamang community context in which to consider the Jetthul findings. The peri-urban, on-road settlement of Sangila, which lies in close proximity to Kathmandu and the off-road rural village of Timling, situated two-days walk from the nearest road linking it with the capital, provide good comparative settings with which to interpret the situation of Jetthul women since road construction.

[14] This Tamang term literally means "youngest son", but is applied to an individual by all family members. Some who retain that position in the family to adulthood, continue to be referred to and addressed by this name.

4.8.1 Agricultural labour and enterprise

Table 4.5 illustrates the percentage of women (and men in the TFRP communities) that has engaged in different categories of agricultural labour and in their lifetime in each of the three Tamang research settings. As I set out in section 3.2.1, an all-weather road connecting Sangila with the capital and the valley in which it lies, was completed in 1975. This stimulated the establishment of small industry, largely carpet-weaving factories in and around some of the villages in Sangila during the 1980s, providing on-site employment (Fricke *et al.* 1991:62). Additionally the on-road peri-urban population has rapid access to a concentration of waged labour options in the Kathmandu Valley.

Qualitative observation of substantial male participation in off-farm economic activities in Jetthul is also mirrored by the quantified lesser involvement of TFRP males in subsistence agriculture compared to women shown in table 4.5. This reflects the higher male involvement in waged non-agricultural labour observed in Jetthul, which is further illustrated by survey data in the TFRP communities displayed later in table 4.6. The higher proportion of on-road men that have never engaged in family farming suggests that the physical accessibility of waged labour in Sangila and the wider Kathmandu Valley has at least in part, reduced dependence on subsistence agriculture. That fewer off-road Timling men have never worked their family farm is undoubtedly due to their more remote location in terms of motorised transport and access to urban centres where wage labour is more concentrated.

Table 4.5 also illustrates that the situation of high female involvement in family-based agricultural production in Jetthul is also similarly apparent in the two TFRP communities. Whereas all women in the near-road and off-road communities of Jetthul and Timling have worked unwaged on the family farm, a small proportion (less than 4%) of peri-urban, on-road Sangila women have never done so. This reflects their wider income-generating options resulting from better access to waged labour both in the village and the surrounding urban and peri-urban area. While the labour situation of Sangila women mirrors that of their menfolk, fewer women than men take up labour opportunities outside family-centred subsistence farming. This illustrates that even with better access to wage labour options, peri-urban, on-road Tamang women remain central to domestic labour and childcare, which continues to bind them to the home to a greater extent than their menfolk.

Female sales of small farm produce, having risen in Jetthul in recent years, is markedly higher than among women of the TFRP. While the wider range of income generating options of

Sangila women may account for their comparatively lower sales, the higher number of near-road and on-road women engaging in this economic activity undoubtedly reflects the higher level of monetisation in their communities. Off-road Timling, however, as a consequence of its more remote setting, is integrated into the cash economy to a lower degree (Dahal & Fricke 1998:63), which is apparent in women's lower involvement of small farm produce sales.

	near-road	off-road		on-road	
	Jetthul	Timling[25]		Sangila[26]	
	female	female	male	female	male
non-remunerative family-based farm work	100	100	98.4	96.4	91.3
selling farm produce	42.5	9.4	22.5	27.1	22.6
agricultural wage labour	7.3	1.7	2.4	12.6	13.3

Table 4.5: Percentage of women (and TFRP men) engaged in agricultural activities during their lifetime.

The low reported engagement in customarily disparaged waged farm work by the Jetthul community is also apparent in the off-road TFRP community of Timling. In the on-road peri-urban setting, however, there is a higher incidence of paid farm work. This undoubtedly reflects the impact of the road in increasing the pace of urbanisation, which is associated with challenging traditional values (Caldwell 1998a:2-3). The concurrent decreasing importance of traditional exchange labour (Fricke *et al.* 1991:69) and increased involvement of both sexes in non-family mediated labour, together with a more severe land shortage and higher land values (Blaikie *et al.* 1977:47), are factors that may account for higher engagement in and reporting of waged agricultural work in Sangila. It is interesting to note that in the road corridor, Jetthul women reported higher engagement in waged farm work than those in off-road Timling. Although the Jetthul sample is small, this may indicate an early stage in changing attitudes to such work.

4.8.2 Non-agricultural labour

Table 4.6 shows the range of non-agricultural labour of the three communities. Across all three settings, women have engaged in portering, road and factory[27] work at some point in their lives. Comparing the range of employment opportunities taken up, women of the TFRP communities have participated in two more sectors than those of Jetthul. While road work and portering are

[25] Source: Fricke *et al.* (1991:53).
[26] Source: Fricke *et al.* (1991:71).
[27] For comparative purposes, work in the Kharidhunga mine by Jetthul women is classified as factory work.

important forms of non-agricultural employment in the off-road and near-road settings of Timling and Jetthul, they are infrequent forms of work of less economic significance to on-road Sangila, where factory work is the most common form of female non-agricultural labour. This illustrates the impact of the differing proximity of roads to the three communities. Direct road access to Sangila has almost completely reduced the requirement for portering, whereas in Timling and Jetthul situated further from roads, human haulage remains crucial to the off-road movement of goods. It is interesting to note that in Jetthul, even with road provision, female engagement in portering is higher than that in off-road Timling. This supports initial findings that provision of the Lamosangu-Jiri road has not diminished portering, but maintains this important form of female waged labour in Jetthul.

	near-road	off-road		on-road	
	Jetthul	Timling[28]		Sangila[29]	
	female	female	male	female	male
army	-	-	3.6	-	20.2
servant	0	0.4	3.6	0.9	3.6
road work	35.4	45.5	65.5	2.4	15.7
factory work	6.1	4.3	2.8	15.8	17.5
construction	0	2.6	14.1	1.1	13.3
carting	0	0	2.4	0	0.3
driver	0	0	0.4	0	0.3
porter	37.8	29.8	46.6	0.2	3.0
other	1.3	4.3	18.8	2.3	24.2

Table 4.6: Percentage involvement in non-agricultural remunerative labour.

Both TFRP survey data and my own observations in Jetthul indicate that men exploit a greater range of employment options and engage in non-agricultural wage labour with greater frequency than women in all settings. This is due to their lower domestic and child care responsibilities, which enable them to work away from the home for longer periods than women and therefore exploit a wider range of income-generating options.

Although the Tamang are not traditionally sought for recruitment into foreign and domestic armies like some other Tibeto-Burman hill groups (Whelpton 1997:44; Bista 1987:75; Jones 1977:99), TFRP data show that a substantial proportion of peri-urban men serve in the armed forces. Indeed, employment in the armed forces is the most common form of non-agricultural employment among males of the on-road Sangila community (20%), whereas a much lower

[28] Source: Fricke *et al.* (1991:53).
[29] Source: Fricke *et al.* (1991:71).

proportion of off-road Timling men and none of those in Jetthul gain their livelihood in this way.

This may reflect longer-term, better access of on-road Sangila men to recruiting information, agents and centres due to their geographical location. Although there is no history of Tamang men in Jetthul working in the army, increasing recruitment of Tamang in the TFRP and other communities (Campbell 1997:224-5; IDS 1986:46) indicates a changing trend over time.

4.9 Discussion

Considering the Nepalese government's concentration of development efforts on improving the road network (set out in chapter 1), based upon the assumption that road transport provision stimulates agricultural development and trade (Thapa *et al.* 1995:1, 13-14; Richards 1984:5), some evidence of progress was expected in Jetthul following construction of the road. Positive results from earlier initiatives, set out in the 6th Development Plan, to incorporate women in the development process and stimulate rural employment were also anticipated since construction of the Lamosangu-Jiri road had improved access to Jetthul. The overall agricultural situation and that of women, however, are of low development. Farming methods remain traditional and few technologies have been incorporated to raise yields, thereby increasing food security and alleviating the intensity of labour input required for production. Although improved access as a consequence of road provision enabled the villages to receive direct government agricultural development assistance in the form of a JTA, there has been no subsequent diversification of cropping, such as the introduction of fruit trees that has been successful in raising nutritional intake and introducing an additional form of cash income in other hill areas (Campbell 1993:62; Euler 1984:84). In spite of road building reducing the transport costs of chemical fertilisers (Blaikie *et al.* 1977:27,50) farmers in Jetthul, like those elsewhere in Nepal, lack the technical and financial support to enable them to improve declining fertility (Antweiler, 1984:103; Hoffpauir, 1978, 248). In Samche and Turana there has been no long-term adoption of improved technologies or techniques to reduce wastage during cultivation or storage. Loss of crops due to pest spoilage that has become an increasing problem in Nepal in recent years (Blaikie & Coppard 1998:35) has not been addressed by project intervention.

The overall lack of agricultural development in Jetthul mirrors the findings of the University of East Anglia Overseas Development Group's study of the impact of road construction in West Central Nepal. Given the prevailing social and economic situation in Nepal, roads alone

provide an insufficient stimulus for growth in the agrarian sector. Adequate and effective intervention are crucial in order that the roads infrastructure might be utilised by poor rural farmers to improve their production and livelihoods. The failure of government agricultural extension services, which the road had enabled Jetthul to access, is apparent in the absence of progress towards development objectives at the community level. This chapter has clearly identified two factors that contribute to obstructing the potential impact of the road in stimulating agricultural development in Jetthul. Firstly, the JTA's poor level of training, support and lack of experience had not prepared him to deliver realistic and practical support to farmers. His higher caste status in respect of the Tamang, together with their poor level of education (which I go on to discuss in chapter 6) led him to adopt a superior and patronising attitude in his dealings with the Jetthul farmers. This caused friction and a mutual lack of respect between the extension worker and the Tamang villagers, which was expressed by farmers paying scant attention to the JTA's advice and rendering his placement ineffective and unsuccessful. The situation in Jetthul, however, is not uncommon in Nepal where the poor level of efficacy in delivering innovations to farmers has been acknowledged as hampering agricultural development (UNICEF 1992:25; Miller 1990:91; Amatya 1989; Blaikie *et al.* 1977:54).

The second major factor determining the lack of agricultural development in Jetthul is poverty. Although the road has improved transportation of chemical fertilisers and thereby reduced their cost, they still remain beyond the financial resources of farmers. While micro-level studies report low use of manufactured soil enriching agents among poor Tamang farmers in rural Dhading (Fricke *et al.* 1991:42), Rasuwa (Campbell 1993:77), Kabhre (Euler 1984:82) and Sindhupalchowk (IDS 1986:53; Antweiler 1984, 103), there is evidence of increasing use by (wealthier) farmers around the Kathmandu Valley (Blaikie & Coppard 1998; Fricke *et al.* 1991:68; Hoffpauir 1978:248) and in the Terai (Cameron *et al.* 1998:18). Diversification and investment in novel crops that the community has no previous experience in growing, consuming or selling, entails an unacceptable risk for poorer farmers. This is apparent in studies where road construction has a detectable impact upon agrarian production and marketing. While road provision as part of the Rapti Development Project, for example (discussed in chapter 1), was deemed to have driven growth in fruit and vegetable cash cropping at the area level (JMA/IIDS 1995:24, 51), socio-economic patterns were apparent among farmers who adopted novel forms of production and were able to exploit markets made more accessible by the road. While wealthier farmers pioneered agricultural enterprise opportunities heralded by improved motorised transport, the risks and investments inherent in

adopting novel farming strategies prevented poorer farmers from taking full advantage of these opportunities to improve their livelihoods. The social inequality surrounding the positive impact of road provision upon agricultural production and marketing is evident throughout Nepal (Nabarro, Cassels & Pant 1989:71), where "... these agricultural 'inputs' still remain outside the reach of most ordinary households." (Caplan 1997:623). In their assessment of the impact of road building in west central Nepal, Blaikie *et al.* reported a low uptake of improved seed varieties and chemical fertiliser. They summarise the situation thus:

> The road was completed in 1973 and new inputs such as fertiliser and improved seed had a limited effect upon the predominantly peasant producers since fertiliser required cash for its purchase and wide agricultural extension advice ...it was only the very advantaged peasant and the employers of labour who could avail themselves of these new road-based opportunities... but both inputs and advice fail to travel more than an hour from the road and certainly do not affect peasant producers at all on the high lands overlooking the road (1977:50).

Although Jetthul farmers are not situated at such a distance from the road that agricultural extension services and inputs fail to reach them, their geographical location engenders greater effort and expense in transporting farming technologies to the village. Given their poverty and intensive work schedules, the additional time and cost involved in hauling agricultural inputs from the roadhead prevents farmers from obtaining the improved yields of those with better access to farming technologies (Porter 1995b:70). While reliance upon road construction as a prerequisite for agricultural development in Nepal is a debatable strategy as far as poorer farmers such as those in Jetthul are concerned, there is evidence that roads may exert a promoting impact across whole communities where there is additional effective agricultural and marketing intervention. Rural Nepalese communities that have successfully improved their livelihoods by diversifying their cropping and marketing strategies following road provision are often those receiving specific programme assistance such as the SFDP (Seddon & Shrestha 1998:39-41). This chapter has shown that factors crucial to enabling farmers to capitalise on new trading options presented by motorised transport are lacking in Jetthul. In order to rectify the situation, effective and appropriate farming and marketing support and innovations are required at the village level.

While the agricultural situation in Jetthul has not improved detectably since the advent of the road, two recent innovations have made positive improvements in women's working lives. Clean water sources that were installed throughout the villages as a direct consequence of road construction and collaboration between the LJRP/IHDP and UNICEF have reduced one component of the female daily transport burden. Not only have these installations significantly enhanced water quality and improved irrigation, but with easier access to water sources, there

has also been a marked reduction in female time and energy expenditure on water haulage. My field notes and extracts from informal interviews illustrate, however, that even with improvements in the water supply, women and girls still spend several hours a day transporting water from the nearest source to their homes. The second innovation, the water-powered grain mill, is the only detectable local initiative taken by any of the villagers. This has markedly reduced the time and energy involved in women and girls processing cereals. Apart from these local initiatives, the time and energy reducing impact of the Lamosangu-Jiri road does not directly benefit women's daily working lives. The majority of female transport in Jetthul, as in many LICs, tends to be incurred in supplying domestic requirements for water, firewood and animal fodder (Edmonds 1998:2:8; Barwell 1996:17-18; Doran 1996; Malmberg-Calvo 1994; Philpott 1994). In Jetthul, these transport tasks and haulage continue to be carried out on foot.

The situation in Jetthul reported in this chapter illustrates that in spite of road provision, in common with other rural and hill regions of Nepal, many households' annual production falls short of requirements (Regmi 1999; Cameron *et al.* 1998:15; Panter-Brick & Eggerman 1997; INFRAS 1995:12; Campbell 1993:54,80; Pudasaini 1993:93,127). As road construction has not alleviated the situation by detectably stimulating farm production, diversification in ways of making a living has become more urgent. One of the strategies increasingly adopted, with implications for women's own working lives, is seasonal male migration. Like many other hill groups, the Tamang have, in the past, moved around and between regions for seasonal work, but in recent decades the need to do so has become increasingly acute, with more men spending longer away from their villages (Blaikie & Coppard 1998:35; Verliat 1994; Miller 1990:57; Dahal 1989:83; IDS 1986:7). Rather than the situation being alleviated following provision of the Lamosangu-Jiri road, male economic migration has become an increasingly viable and necessary option since the road linked Jetthul with areas offering more concentrated wage labour opportunities. Following some permanent out-migration from the area during the production crisis of the 1960s (INFRAS 1995:10; INFRAS 1991:116), seasonal male migration, encouraged by provision of the road (INFRAS 1995:23), has become an increasingly significant strategy for families remaining in subsistence agriculture in Jetthul.

Many of the Jetthul men engage in temporary and extended employment both locally and further afield in Kathmandu and the Terai. For the majority of older, married men the nature of work centres on labouring on construction sites and portering, whereas younger pre-marital men have shifted the focus of wage labour towards the tourist industry in recent years. TFRP data together with those from Jetthul show that in spite road of provision improving physical

access to a wider range of jobs, male Tamang employment is concentrated at the unskilled and poorly remunerated end of the market. The Tamang as *matwali*[30] and ethnic people, are regarded as low caste by the Hindu majority, a factor that decreases their range of job options (Acharaya 1995:162; Folmar 1992:233). This together with their poor educational status (which I go on to examine in chapter 6) has determined that employment opportunities remain within the poorest paid and lowly sectors of the market (Campbell 1997:226-7; Fricke 1993:83; Fricke, Thornton & Dahal 1990:288; IDS 1986:56; Antweiler 1984:105) despite road provision having raised the economic status of disadvantaged *jats* in some areas of the LJRP (INFRAS 1995:15). The employment situation of the Tamang and other ethnic and low caste groups in Nepal has been succinctly summarised by Bista (1991:129):

> The majority of Nepalis do not have many job choices since occupation is determined by birth. For caste people this means an ascriptive determination of occupation, and for the non-caste people a determination by other cultural and economic circumstances. In either case, people are not accustomed to thinking of a choice of profession but learn, from generation to generation, the same professions from elders within the family.

The concentration of Tamang in low pay employment has important social and biological implications according to demographic transition theory. Rising income is understood to have been a significant factor underlying the trend of men keeping wives and children out of the workplace during the mid-1800s in England. By the close of the century, fertility decline in working class England was sharpest among the better-paid, skilled labour force. Unskilled, low-wage earners, however, maintained the traditional economic and marital fertility strategy of pronatalism, which maximised the flow of wealth from children to household (Levine 1987:192). As the Tamang, despite road provision improving physical access to jobs, continue to encounter social barriers to better employment and pay, there is scant opportunity for them to raise their economic status and thereby encourage a gradual decline in their requirement for large families.

Given the substantial proportion of on-road peri-urban TFRP men employed in the armed forces, perhaps with improved access to Kathmandu provided by the road, Jetthul men will begin to gain acceptance into domestic and foreign armies. These provide some of the few forms of stable, secured and pensioned employment in Nepal, which have positive implications for ongoing and future old age security, both factors that are associated with fertility decline (Findlay & Findlay 1987:27).

[30] The term *matwali* means "alcohol consuming". The position of the Tamang within the Nepalese social order is set out in chapter 2.

Qualitative observation that a proportion of Jetthul men work almost exclusively outside subsistence farming is reflected in TFRP survey data. The higher proportion of male non-agricultural labour in the peri-urban community reflects the increased opportunities for waged work associated with its on-road location, close proximity to Kathmandu and the higher level of industrial development within the area. Although for generations, Tamang men have engaged in seasonal off-farm labour in Jetthul and elsewhere (Fricke, Thornton & Dahal 1990:301), road provision has undoubtedly encouraged a higher proportion of young men to work outside the village for longer periods of time than previous male generations during their youth. While studies of communities within the Lamosangu-Jiri road area have monitored the widespread increase in the temporary out-migration of young men from the area since the introduction of the road and motorised transport (INFRAS 1995:23), micro-level investigation in Jetthul highlights the consequences this has upon women's lives.

In Jetthul, periods of male absence are highly variable, ranging from a few days to almost complete absence in the case of the younger men. The resulting void in the family work force increases reliance upon women and children to maintain home-based production. As I go on to show in chapter 6, as a consequence of the low technology high labour intensity nature of the agricultural cycle and the depletion in household labour, children, particularly girls, are unable to attend the village school. The situation in Jetthul and other parts of rural Nepal following road provision (Ghimire 1999:16; Shrestha 1998:18) echoes the "intensification of women's and children's labouring experience" of the early industrialisation of Europe (Levine 1987:114), which is regarded by some to be a common feature of the development process in modern LICs (Julémont 1993:107). This means that women are bound to the home farm and are therefore unable to broaden their income-generating sphere beyond the village. In Jetthul and some other rural Tamang communities, while men and some women seek seasonal supplementary incomes outside the village (Campbell 1993:94; Fricke *et al.* 1991:55), the majority of women remain central to family-based farming throughout the year (Fricke, Thornton & Dahal 1990:289; IDS 1986:7; Euler 1984:90; Acharaya & Bennett 1981:39). Whereas men are able to use the road to access more distant wage-labour, Jetthul women like those in other LICs (Doran 1996; Porter 1995a:9; Malmberg Calvo 1994), continue their daily labour-related transport and travel on foot.

Comparison of my findings with TFRP data illustrate the concentration of Tamang women in unwaged family-centred agriculture in all settings. Although a small proportion of the on-road peri-urban women earn their living completely outside the subsistence arena, female

participation in the home farm labour force is overall higher than that of men. The ways in which women are engaged in family-centred, unremunerated labour has implications for female participation in the process of development in Nepal and the range of their own life experience. For the women of Jetthul, in common with those in Timling, Sangila and other farming communities in LICs, the intensity of household subsistence agriculture and domestic duties anchors them to the household and prevents them engaging in work outside the village (Ware 1993:274; IDS 1986:56; Acharaya & Bennett 1981:45), despite improvements in potential mobility and income generating options that road provision may offer.

Female non-agricultural employment in Jetthul is characterised as unskilled, local and short-term. The road building project itself presented the greatest recent source of waged non-agricultural labour in which a substantial proportion of Jetthul women engaged. Women were able to take up employment in road construction as it was both close to the village and casual, which enabled them to combine waged labour with childcare, home maintenance and their agricultural responsibilities. As with other road projects in Nepal, however, the construction phase presented economic opportunities that diminished with the road's completion (Blaikie *et al.* 1977:48).

As men in Jetthul exploit labour and markets outside the village, the opportunity presented by road provision for relocation of marketing and expansion into new geographical areas, both local and further afield in Nepal, has not been realised by Jetthul women. This is undoubtedly related to the continued overall production shortfall of the majority of villagers in the absence of agricultural development (a further potential presented by the road, yet unrealised). The situation in Jetthul is, however, not unique. The Rural Access Programme Impact Review (2000:15) notes that in the decades following road provision in West Central Nepal, rather than enabling poor hill farmers to improve their livelihoods through accessing wider markets for their produce, the hill areas became consumers of produce from the Terai and India:

> ... there is certainly evidence of an increased flow of goods and services between the regions, but the flow was particularly of goods from the Terai (particularly food grain) and from India (particularly manufactured goods, but also agricultural produce) into the hills (both urban and rural food-deficit areas). Remarkably little in the was of local (hill) produce moved in the opposite direction ... The greater integration of hills and Terai/India, facilitated by road construction, did not obviously promote a greater equalisation of resources and incomes between the regions, as implied by the evaluation of the Western Hills Project, but rather the reverse, if anything.

Unlike the wider geographical sphere of male trade, small enterprise conducted by Jetthul women focuses on the sale of agricultural produce within the village sphere. Overall, however,

the women of Jetthul have not significantly developed and exploited new trade opportunities, either in terms of the items traded or their geographical sphere, unlike Tamang elsewhere (Campbell 1993:93,98) and other Tibeto-Burman hill groups in Nepal (Watkins 1996:73; Acharaya & Bennett 1982). While the road has effectively connected Jetthul with commercial opportunities further afield, it has concurrently reduced potential for trade to foot traffic passing through the off-road villages and concentrated markets at road service areas. By channelling human movement into motorised traffic, the road has created a corridor that bypasses villages such as Turana and Samche. In so doing, the road has effected a decline in local trade that existed before road construction and shifted it to concentrated marketing areas at key points along the road, such as the town of Lamosangu. As Seddon and Shrestha comment:

> The decline of some long distance trails, as a result of road construction and the relocation of transport routes, is one factor which has affected men and women who previously were involved in some way in activities along or beside the trail." (1998:37).

Unlike Lamosangu to the west, which has become a centre of trade and administration and Muri to the east, which provides an excellent view of the Himalayas, Goli has no attraction to cause vehicles to stop or bring outsiders through the villages.

In this chapter, I have shown that women's means of contributing to the household income, their options for labour and trade have not detectably developed since the advent of the road. Rising land prices that commonly accompany road construction in rural Nepal (Caplan 1997) place relocation near the roadhead out of reach of the majority of Tamang in Jetthul. Those obtaining most immediate advantage from road provision are certainly not the women of Jetthul. As has happened in other areas of Nepal:

> ... the first to benefit are those owning land immediately adjacent to the road; they benefit from major appreciation of their land values even before the road is constructed. Next are the traders and vehicle owners... (Shrestha 1998:3).

Those capitalising from the economic benefits of road provision are not Tamang, but people of traditionally more advantaged *jats* (Hamill *et al.* 2000:93-94). With women becoming increasingly bound to family-centred agricultural production with male absence, the ongoing necessity for additional income by females has to be realised within the village domain. While the Tamang do not have a tradition of itinerant female traders, common among some other Tibeto-Burman groups (Watkins 1996:50; Acharaya & Bennett 1981:229), in some Tamang communities in east Nepal, women have responded to changing economic circumstances by taking up commercial craft production (Euler 1984:90; Antweiler 1984:106). In Jetthul,

however, women traditionally practise spinning, weaving and carpet making on a purely domestic level, with small trade and exchange within and between villages. The impact of the road, however, has depressed female craft production by increasing the availability and lowering the costs of manufactured goods. Cheap textiles imported from China at the Tibetan border, along the Arniko and Lamosangu-Jiri roads have decreased the demand for locally produced cloth reflecting a nationally-experienced decline in cottage industry as a result of foreign imports (Acharaya 1995:162; Zivetz 1992:60).

The lack of locally produced wool and other raw materials has also contributed to the decline in home carpet weaving, an area of Tamang craft that may have had the potential for village-based development. The opportunity for women in Jetthul to engage in cottage industry is limited, as very few have access to capital to buy raw materials necessary to initiate small enterprise. This highlights the reality for the majority of rural Nepalese women, that developing economic systems such as credit, remain beyond their geographical and social sphere (Watkins 1996:73; Thacker 1993:2; UNIDO 1988:X; Acharaya & Bennett 1981:229). While road provision presents expanded business opportunities for the more advantaged sections of Nepalese society (Nabarro *et al.* 1989:72), in the absence of production credit projects for women, the most vulnerable of the rural population remain unable to develop new strategies to ameliorate their poverty.

Although the impact of road provision on craft and small local industry in Nepal has been previously identified (Blaikie *et al.* 1977:85), the Jetthul situation serves to illustrate the greater severity of this decline upon women, whose farm and domestic responsibilities render them less economically and geographically flexible than men. The failure of the local IHDP cottage industry project represents a missed opportunity for women of Jetthul to generate cash within the village (Dunsmore 1998:22), especially as the successful female-centred WDP and PCRW programmes have not been implemented in the area. Because traditional female crafts are being rapidly replaced by male-dominated industrial production (Rana & Shah 1987), opportunities for rural women to create a niche in the economy are becoming depleted with time and the development of the economy. In some Nepalese hill communities engagement in trade and enterprise is reported to support female autonomy, generate wealth and motivate girls to later marriage (Watkins 1996:73; Acharaya 1995:168), which in turn effects reduced life-time fertility. The lack of effective project support and development of female commercial activities at the village level illustrate the failure of implementation of government policy to increase female participation in the wider economy, and support economic initiatives

associated with fertility decline.

The absence of effective project intervention to increase income diversification following road provision has important demographic implications. It has long been recognised that child labour increases with the importance of agriculture to the household economy (ILO 1963). Within the Asian setting, both the need for children and their labour becomes less pressing as the importance of agriculture is relaxed with income diversification, especially that of women (Vemuri & Sastry 1991:38; Rosenweig 1981). The low technology, low yield and labour intensive nature of agricultural production in Jetthul places a high value of children's labour and maintains the flow of wealth from offspring to parents (Mellander & Jönsson 1993:17; Folmar 1992:234; Shrestha & Shrestha 1991:36). Aside from traditional social and cultural influences, the Tamang have strong economic reasons for having children: the more surviving children parents produce, the more secure the subsistence workforce of the next generation, and the welfare of parents in incapacity and old age. Indeed, it has been observed that among subsistence agriculturists, even those experiencing a high level of population pressure, households with larger numbers of offspring experience greater economic security (Nag *et al.* 1978:300). Zivetz describes the situation of the majority of Nepalese households:

> ... children are probably the only assets which are not at risk of arbitrary removal (except, of course, through illness or death). In agrarian economies, more children means more hands in the fields. In a transitional monetizing economy, one or more sons can be sent off to earn while other family members (including the sons' wives) work the land. In either case, the incentives for a large family are strong (1992:35-6).

The potential fertility-reducing implications of male participation in the wider economy (Acharaya 1995:151; Tuladhar 1993:176; Axinn 1992a&b) are also tempered by the continued concentration of women in family-mediated production within the village. With the low participation of women in the wider economy there is little in female working life to stimulate the adoption of behaviours associated with fertility-reduction. Indeed my observations and analyses of women's working lives underscores the persistence of the importance of children and the fact that women remain under the influence of family-mediated traditional values (Dahal 1992:3). The fact that women in Jetthul engage in small trade, local casual labour (socially acceptable and unacceptable), in addition to their heavy family-based work load, is indicative of their level of poverty (Dahal 1989:77) and the shortfall in household production, rather than a broadening of lifestyle options following road provision. For Nepal's least advantaged women, often the only available strategy to meet their household's needs is to increase the *amount* of work they do, rather than shifting the nature of their employment (Ware 1993:278). This not only excludes poor women from the mainstream development process, but

given that contraceptive prevalence is observed to increase with income and education in Nepal (Suwal 1996:75), it also reduces the potential to address high population growth within the poor majority of the population.

In this chapter I have shown that provision of the Lamosangu-Jiri road, while improving access for male migratory labour, has not detectably stimulated agricultural development, nor female enterprise and participation in the wage-labour market. To the contrary, by encouraging male economic migration the road appears, at least to some extent, to have exacerbated the work burden of not only women, but also of children and the elderly remaining in the villages. This has social and biological ramifications for the Jetthul communities. The widening gap between male and female roles in the household economy in Jetthul has implications for gender relations. Tamang society, in terms of Dyson and Moore's categorisation (1983:44-46) and within the wider country context, is traditionally gender egalitarian. In the course of this and the subsequent chapters, however, a pattern emerges of growing inequalities between males and females in Jetthul. Participation in education and non-agricultural employment, regarded as important factors in supporting female empowerment (Acharaya 1995:152), are low among Jetthul females. Increasing male employment outside traditional farm production has wider social implications (Campbell 1997:227; Fricke *et al.* 1991:55; INFRAS 1991:18). There are indications that where males engage in waged labour and women maintain the household's subsistence activities, an imbalance is created and the status of women's economic contribution is diminished (Watkins 1996:171). Furthermore, some men who participate in wage labour outside the village take on a more worldly demeanour from their exotic experience (Miller 1990:52) which may further aggravate gender inequalities.

The constellation of conditions since the advent of the road, which include poverty, lack of education (as I show in chapter 6) and narrow local female income-generating options, sound a warning signal for the health and welfare of the Jetthul community and women particularly. Although there is strong evidence to support my conclusion that women do not yet engage in commercial sex, circumstances are ripe for procurers to establish the trafficking of girls and women from Jetthul. As commercial centres and vehicle stops along the road develop, local demand for prostitution is also set to rise, exposing women increasingly to risk of STIs, most importantly HIV, and leading miserable lives. As Seddon (1998:40) has noted:

> While the larger towns are clearly becoming major centres of the commercial sex industry in Nepal, smaller roadside locations throughout the country also provide porters, bus and truck drivers, and other [sic] travelers with opportunities for sexual encounters. The constant interaction at these roadside locations increases the chances of the spread of disease, both

through commercial sex transactions and also by less "commercial" casual encounters involving local girls and women seeking a supplementary income.

Although in the short-term the road offered local labour options for women, it has failed to provide them with viable long-term means of income-generation, while the requirement for cash has risen with local consumerism. Given that road provision has effectively narrowed rather than expanded female means of generating cash, while at the same time increasing the vulnerability of local women to the growing demand for commercial sex workers, project intervention is urgently required to prevent a serious health and female development crisis in Jetthul.

Chapter 5

Experience outside Jetthul: Travel, exposure to urban life and mass media

The new mobility of young people and the anonymity of city life reduced the pressures toward traditional behaviour exerted by the family and community.
F.W. Notestine 1953:16

In development too, the losers have always been those poorer in information.
INFRAS 1995:117

Cities are centres of economic growth, providing the impetus for socio-economic innovation and change.
International Conference on Population & Development 1994:64

Here we find images of romance, an emphasis on individuality, on personal pleasure, on freedom from family and village obligations.
J. Watkins 1996:254

5.1 Introduction

Contact between rural and urban areas is an important aspect of the theory of the diffusion of information, ideas and behaviours relating to the adoption of fertility limiting practices (Caldwell 1998:2; UN 1994:9; Ertur 1994:23; Caldwell, Reddy & Caldwell, 1988:55; Retherford & Palmore 1983:29). Within this framework knowledge, changing attitudes and behaviours are understood to diffuse from urban to rural areas (Niraula & Lawati 1998:170; UNFPA 1996:44; Lin & Hingson 1974:190). In Nepal, where family planning services were provided only in cities until 1969 (Tuladhar 1989b: 224), where young people remain exclusively within the boundaries of village and family-centred life, the potential to learn of contraceptive technologies and gaining access to them is reduced. Indeed, Subedi (1996:52-55) interprets 1991 NFHS data as reflecting the lack of awareness of contraception and wider

family opposition to fertility control in the rural population. This highlights the importance of experience outside the family and village sphere in developing personal choice and gaining access to family planning information and services.

The previous chapter revealed a situation of low work experience outside the village and family sphere among women and girls in Jetthul. The Tamang, however, are a mobile community and travel for reasons other than work and trade (Campbell 1993:157; Fricke *et al.* 1991:48). Studies monitoring local communities' use of the Lamosangu-Jiri road have concluded that "... on average each inhabitant of the project area would travel outside the project area once per year." (INFRAS 1991a:128). While this reflects the general trend of increasing travel following road provision, in common with the majority of earlier literature on roads impact, it does not assess the frequency of road travel by gender (Ghimire 1999:11; Fernando 1998; Jones 1984:162; Blaikie, Cameron & Seddon 1977:71-73). Indeed, in Nepal itself, apart from a recent study by Seddon and Shrestha (1998), there has been very little investigation of the developing road transport infrastructure and the economic and social consequences by gender in Nepal. Given the importance of road transport development in increasing the human flow between urban and rural areas (INFRAS 1995:20; Ertur 1994:28; Blaikie *et al.* 1977:37), and that even brief contact with city life is associated with stimulation of social change in rural areas (Caldwell, Reddy & Caldwell 1988:55), this chapter considers the extent to which women participate in road travel and whether there has been detectable change in their contact with urban centres over recent years. Examination is made of female experience outside the family and village setting, by exploring exposure to urban and foreign environments and cultures through actual exposure and virtual contact via mass media.

5.2 Objectives

In order to provide a profile of patterns of female travel, residence and media exposure in relation to construction of the Lamosangu-Jiri road, my objectives were to:

- quantify the frequency of female urban contact in the 12 months preceding October 1991 to determine the level of female participation in use of the road;
- profile age and marital status of women when they first visited a city, to determine whether there has been change in the timing of first urban experience in women's lives over time;
- determine patterns of residence in urban areas for periods of a month or more, according to marital status, to gain an impression of extended urban exposure at different stages in women's lives;
- quantify and profile Jetthul women who lived outside Nepal and determine changes in

international experience over time;

- assess the degree of female contact with various modes of mass media within the village and urban settings;
- chart women's exposure to mass media since construction of the Lamosangu-Jiri road.

5.3 Women's travel to urban centres

For the Tamang of Jetthul, travel is an import aspect of life and journeys are focal talking points. This is apparent in the greeting "*Kahan janne?*" ("where are you going?") between people entering and leaving the village and exchanged with those passing along tracks and trails around the villages. The majority of female travel is local and on foot and loads are transported by women on their backs using traditional *doko.* Female work, as I showed in the previous chapter, is centred on agro-pastoralism and daily female travel takes place between the home, fields and *goths* and haulage of fuel wood, fodder, dung and water takes place along rural tracks. Women travel on foot to consult the local healer and very occasionally, as I show in chapter 8, they walk to the local government health post at Dandarpakhar. Every so often, when manufactured consumables such as kerosene and cigarettes are required, women walk up to the shop at the roadhead at Goli. Because of the walking time involved, most women visit the shop and make their own sales and exchanges with other women *en route* to other productive tasks such as fuel wood and fodder collection. Sales and exchanges of kitchen garden produce, also discussed in the previous chapter, are similarly conducted by walking and carrying items to be sold, purchased and exchanged. Even though part of women's journey takes them along the road, they tend to continue on foot to save the cost of motorised transport. Although for many short local journeys the cost of travel is only a few roupees, regular use of road transport is beyond the economic resources of most households. In Jetthul therefore, motorised transport does not directly serve female productive and domestic needs, neither has road provision stimulated increased use of intermediate forms of wheeled transport such as hand carts and bicycles that have, to some extent, alleviated the female transport burden in parts of the Terai (Ghimire 1999:16-18).

Although closely bound to the village and household by the intensity of their agricultural workload and child care responsibilities, married women in particular also travel to other villages in the locale. Many of these trips are to fulfil social obligations and are mostly conducted on foot, using paths that existed years before the advent of the road. Although the majority of such visits are within a day's journey of their home village, women usually stay for several days and sometimes for weeks at a time. For those born outside Turana and Samche,

regular visits to their *maiti ghar* (natal households) form an important aspect of female social life and obligation as are rituals of life and death such as marriages and *ghewar*[1] that also necessitate travel between villages.

Visits to natal kin are not only required by Tamang custom, but also serve to maintain close bonds with brothers, from whom women may seek assistance and shelter in times of trouble. Such visits not only maintain relationships with natal kin, but also provide women with wide-ranging local social networks. These, as I discussed in section 2.4.4 and further consider in chapter 7, endow women with specialised local knowledge that is key in the selection of marriage partners of their children and the formation of potentially advantageous social and economic alliances.

The majority of female travel by motorised transport is social in nature. With the introduction of cheap, rapid transport following road provision and the high level of male economic migration, women increasingly use the road for personal travel to visit husbands, fathers and brothers living and working in Kathmandu. By far the majority of female long-distance journeys are between Jetthul and Kathmandu. Although many of the men work in the Terai for parts of the year, few women travel to the region. Such journeys cost several hundred roupees, the equivalent of a month or more of their husbands' earnings and many women with husbands working there say it is too far and too expensive to journey to visit their spouses in the Terai. Few women expressed an interest in visiting the area, saying that it is too hot on the plains and there are "too many Indian people", whom they distrust. The prospect of a visit to Kathmandu, however, is generally met with high emotions of anticipation and excitement,[2] for then women exchange their hard daily toil of domestic and farm duties for more social and entertaining pursuits. Although the primary objective may be to maintain contact with male relatives working in Kathmandu, such visits also provide opportunities to make pilgrimages to Buddhist shrines in the valley such as those at Swayambu and Boudanath (illustrated in figure 3.3) and to visit and exchange news with wider urban-based kin. For Jetthul women, urban visits also provide excellent shopping opportunities. Markets in Kathmandu provide the opportunity for women to buy clothing, medicines and other consumables that are not available at the road head shop in Goli and to take advantage of lower prices. The importance of gaining access to a wider variety of cheaper goods in the capital is a significant aspect of road provisioning and use in rural Nepal (Seddon & Shrestha 1998:31-32).

[1] Funerary rituals held on the 49th day after death.

[2] This is illustrated by women's own words in extracts from recorded conversations set out in the following pages.

Plate 5.1: Buses on the Lamosangu-Jiri road.

Culturally, women have a broad range of experiences on city visits and enjoy seeing the sights. They are exposed to urban and foreign people and by watching videos and visits to the cinema observe and experience a wide range of values and behaviours that differ widely from that of village life. Women delight in some of the many festivals celebrated in the city during their sojourns to Kathmandu. The following extracts from taped, informal interviews and field notes reveal something of the nature of female travel to Kathmandu and opinions of urban experiences:

Soma Tamang, aged 47, told me of her recent travels:

KM: Have you ever been to Kathmandu in your life?
ST: Two days before I came back.
KM: And how many times have you been there, to Kathmandu?
ST: Twice in my life I have been to Kathmandu... I have been there for *gai jatra*[3] (laughs).
KM: Do you like it in Kathmandu?
ST: (laughs a lot).
KM: What things have you seen there in the city?
ST: Boudha, Swayambu, Jiri...
KM: You've been to Jiri?[4] Did you like it there?
ST: If my husband wants to take me again I want to go.

---

[3] *Gai jatra* is a festival that falls a month or so before that of *Dasain*. Although *gai jatra* (literally meaning 'cow festival') is concerned with the spirit of those that died in the past year, it is a highly entertaining and fun festival, celebrated particularly around Durbar Square in Kathmandu and other areas within the Kathmandu Valley.

[4] Jiri is the town situated at the most eastern point of the Lamosangu-Jiri road (shown in figure 1.1). It became fully linked with Jetthul by motorised transport on completion of the whole road in 1985 (INFRAS 1995a:3), but is not a common destination for men and women of Jetthul.

Cheering Tamang described her reasons for travel. She was aged 26 and had been married for two years:

KM: ... and is your husband here at home with you now?
CT: He is away in Kathmandu. He is working for the police [as a *peon*].
KM: Have you been to Kathmandu?
CT: I go to stay with my husband.
KM: Have you been to any other places in your life?
CT: ... only Kathmandu to see my husband...
KM: ... and do you like it there, in Kathmandu?
CT: Yes. I like it.
KM: What do you like about the city?
CT: In the city I do not have to walk up to the fields every day. It is an easy life there. I go to the markets – they have everything there.
KM: How often to you go then, to see your husband?
CT: Just once [in the year he has been working in Kathmandu]
KM: Just once? Wouldn't you like to go more often?
CT: Yes I want to go, but how can I? We are poor people. Who will weed the fields?

I met Pema walking up to the road as I was returning to Jetthul from Kathmandu:

PT: Where are you going, sister?
KM: To Samche, we are just returning from Kathmandu.
PT: Did you go to see your family?
KM: No, my family are staying in England. I went to send some letters, see some friends and buy kerosene.
KM: Where are you going sister?
PT: To Kathmandu.
KM: To Kathmandu? Where will you stay?
PT: I will stay with my husband.
KM: And what will you do there?
PT: I will go to Swayambu to do *puja* for my father [who died earlier in the year].

Accompanying Pema was here unmarried sister-in-law Kanchi, aged 16.

KM: ... and, younger sister, are you also going to Kathmandu with older sister?
KT: Yes I am going to Kathmandu.
KM: What will you do there?
KT: I am going to by some cloth for a *loongi* and see a film at the cinema!

5.3.1 Frequency of travel

Since construction of the road the female community in Jetthul has experienced greater contact with the capital than previously, when the journey took days of arduous walking and carrying goods and possessions, which necessitated long absences from the home and farm. From day-to-day observations of female movement it is apparent that long-distance journeys are not frequent. Several factors already highlighted in this thesis exert a constraining effect upon female mobility and the frequency of long distance travel as Cheering's comments above illustrate.

Women's role in domestic, childcare and subsistence production that has become pivotal as male economic migration has been encouraged following road provision and binds them to the village, precluding long and frequent absences. An additional major constraint of female travel is continued poverty. A return journey to Kathmandu by bus costs in the region of NR 100. Given the low status of male Tamang urban employment revealed in the previous chapter, the consequential low pay and savings after lodgings are paid for leaves very little excess cash for female personal travel. Although it is possible to travel more cheaply in the back of trucks and lorries by arrangement with individual drivers, this form of transport is very uncomfortable and dangerous as it is not possible to see the approaching road adequately to brace against the vehicles movements. This leads to travel sickness and injuries and is unsustainable over long distances.

In order to gain a quantitative insight into women's annual use of the road to visit urban centres, in the survey they were asked: "*In the past 12 months, have you been to a city like Kathmandu, Lalitpur, Bhaktapur or Jiri?*" Of the 82 women surveyed, 24 (29%) responded that they had visited a city in the 12 months preceding October 1991. One of the women, Soma, (from whose taped interview an extract is transcribed above) had visited the town of Jiri, some 90 km east of Jetthul. For the other 23 women, Kathmandu had been their primary destination, although some had also visited the nearby cities of Bhaktapur and Lalitpur (shown in figure 3.3).

The frequency of urban contact was quantified by asking women: "*How often would you say you have been to a city in the last 12 months? Many times, a few times, once or never at all?*" While the majority of women (71%) had not had any urban contact in the previous 12 months, 12% (n=10) said they had made just one trip to the city during this period and another 12% (n=10) said they had visited the city "a few times" in the past year. Only 5% of the women (n=4) reported visited urban centres "many times" in the previous 12 months.

The number of women who travelled to a city in 1990-91 was too low to enable credible statistical testing of the relationship between travel and age. Figure 5.1, however, illustrates the patterns of urban travel by 5-year age bands for all the women surveyed in Turana and Samche. It shows that while the majority of women of all age groups did not visit a city in the year, a proportion of women of each age group did. The three women who reported frequent journeys were all relatively young, between the ages of 15 and 24.

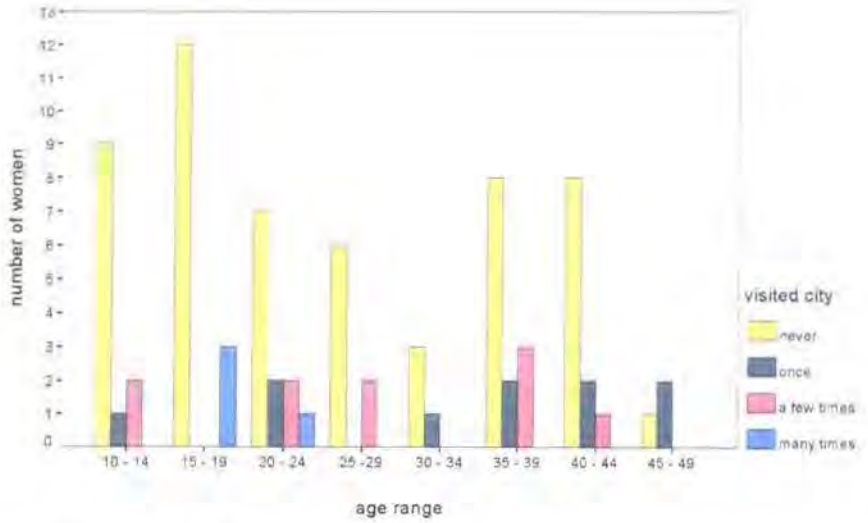

Figure 5.1: Number of women, by age range, who visited urban centres in the 12 months preceding October 1991.

The primary purpose of all the women's journeys was to visit male relatives, the majority being married women travelling to see husbands and sons working in Kathmandu. Some of the unmarried girls who made these journeys did so with friends, sisters-in-law or their mothers and stayed with their own fathers and brothers in the city or other city-based friends and relatives. While relatives prefer that girls travel accompanied for protection, unlike Hindu communities in Nepal, the absence of cultural concern surrounding female virginity at marriage (considered further in chapter 8) allows unmarried Tamang girls to enjoy a high level of personal mobility. Once in the city, girls are, to a certain extent, free to move around outside the sphere of senior family members. This has important implications for potential social change relating to demographic transition given current theory concerning urban exposure, reduced kin control of young people.

5.3.2 Marital status of women travelling to urban centres

Because Tamang women in Jetthul experience varying responsibilities and demands upon their time at different stages in their lifecourse, it is pertinent to explore female mobility and urban experience enabled by road provision according to marital status. As in chapter 4, women were grouped into two cohorts, according to whether they had ever been married, or had never married in their lifetime and simple comparisons made.

Of the total 24 women who said they had visited a city at least once in the 12 months preceding the survey conducted in October 1991, 17 were ever-married and seven had never married.

	number	percent
ever-married n=54	17	32
never-married n=28	7	25

Table 5.1: Percentage of women who travelled to urban centres in the previous 12 months, by marital status (n=24)

Table 5.1 illustrates that the majority of women making urban visits from Jetthul in the previous year were of the older, ever-married cohort. The proportion of ever-married women who had been to a city in the preceding 12 months was 32%, compared with 25% of women in the never-married cohort. This reflects qualitative observations that the majority of female long-distance road users are married and that their primary purpose of travel is to visit spouses working in Kathmandu.

Because the number of women travelling at different frequencies is too low for statistical testing of significance, I explored frequency of urban visits according to marital status using simple comparison of group proportions. To do this, I calculated the journey frequency as a percentage of city travellers of each marital group.

	"once"		"few"		"many"	
	number	percent	number	percent	number	percent
ever-married (n=17)	9	53	6	35	2	12
never-married (n=7)	1	14	4	57	2	29

Table 5.2: Frequency of urban contact in the preceding 12 months, according to marital status.

The group proportions set out in table 5.2 show marked differences in the frequency of urban contact of younger, pre-marital and older, ever-married women. Of the 17 ever-married women who had urban contact in the year 1990-91, just over half (53%) had visited a city only once, whereas only 14% of the younger pre-marital travellers had made a single visit. The majority of pre-marital women, 57%, said they had made several visits during the year, compared with just 35% of the older, ever-married travellers. This trend is also reflected in the higher proportion of the pre-marital cohort (29%) who made "many" visits to an urban centre in the last year, compared with only 12% of the ever-married group of travellers.

The statistical profile of Jetthul women who visited a city in 1990-91 reveals that the majority,

married women, tend to do so on a yearly basis. While a higher proportion of married women travel to Kathmandu, they do so infrequently as their marital status engenders greater agricultural, household and childcare responsibilities than that of younger pre-marital women and girls. Quantitative assessment of married women's visits to urban-based husbands highlights the degree of spousal separation resulting from male migration and the infrequency of married women's urban contact, both of which have implications for marital fertility. Although a lower proportion of never-married women made urban visits during the year, they did so with greater frequency than their married counterparts. This indicates that since road provision women are increasingly gaining frequent access to Kathmandu at an early stage of their adult lives, prior to marriage, when they are at their most receptive to novel concepts and values, which has strong implications for social change. Later in chapters 7 and 8, I go on to consider whether the increase in urban exposure has influenced detectable changes in female autonomy in the marriage process and reproductive behaviour affecting fertility.

5.4 Urban residence for a month or longer

As I set out in chapter 4, during the extreme production crisis of the 1960s, some families moved out of Jetthul, many of whom relocated to Kathmandu. Some of these families settled in rented rooms and apartments on the periphery of the tourist area of Thamel, and around Assan Tol. Most of the Tamang who have relocated to Kathmandu remain employed at the lower end of the labour market, although many of the younger men have gained a foothold within the more lucrative tourist industry. The lifestyle of the city-based families differs markedly from that of their rural friends and relatives. As livelihoods are gained exclusively from wage labour, Kathmandu families are more immersed in the cash economy. Although many mature urban Tamang women continue to wear traditional clothing, the younger generation are drawn towards modern, western styles of dressing. On a day-to-day basis they observe foreigners who are concentrated in the centre of the city and some of the Jetthul families settled in Kathmandu have acquired television sets, video cassette players and satellite connections. While some women, when visiting urban areas stay with husbands and brothers in their lodgings, women also have the option of staying with friends and relatives permanently based in Kathmandu. Wherever women stay, they spend substantial amounts of their urban visits at the houses of friends and relatives who have been Kathmandu-based for several decades. This exposes them to changing views and values of Tamang peers who arguably appear more sophisticated, and in some cases, provides them with access to home-based audio-visual media.

With increasing networks and contacts in urban areas, it is pertinent to consider whether, since construction of the Lamosangu-Jiri road, Jetthul women are experiencing increased urban exposure by staying in cities with relatives and friends for extend periods of time. Quantitative investigation revealed that of the 82 women surveyed, 12 (15%) had lived for a month or longer in a city during their lifetime. Of these, three women had lived in urban centres in India and nine had lived in Kathmandu (two of whom had lived both in Indian cities and Kathmandu).

age	marital group	in Kathmandu	in India
13	never	X	
15	never	X	
17	never	X	
18	never	X	
19	never	X	
21	never	X	X
19	married	X	X
20	married	X	
35	married	X	
41	married		X
44	married		X
49	married		X
	total	9	5

Table 5.3: Urban residence of one month or more in duration.

Table 5.3 illustrates that all the women who ever lived in the capital for extended periods of time were aged 35 or younger, the majority of them under 21. This shows that Jetthul women are experiencing extended periods of urban life at a highly impressionable stage of their lives. The women who had only stayed in Indian cities were markedly older, aged between 41 and 49. This reflects the general decline in economic links between Jetthul and India and shift in male migration to Kathmandu and the Terai, discussed in the previous chapter.

	before marriage		after marriage	
	number	percent	number	percent
ever-married women	3	6	3	6
never-married women	6	21		

Table 5.4: Marital status of women when they first resided in Kathmandu for a month or longer.

Analysis of the marital status of women who stayed in a city for a month or more reveals extended urban residence to be markedly greater among the generation of younger, pre-marital

women. While the proportion of the older ever-married cohort residing in Kathmandu for a month or longer remains the same after their first marriage at just 6%, 21% of the younger, never-married women have experienced extended urban residence. Although the simplistic *post hoc* cohort approach to analysing changes in residency patterns cannot be regarded as accurately reflecting transformations solely due to road provision, it does appear at least to some extent, that pre-marital urban residence has increased following road construction of the Lamosangu-Jiri road.

5.4.1 Timing of urban residence

In order to determine the timeframe of urban residence within the context of the Lamosangu-Jiri road project, women were asked how old they were when they first stayed in Kathmandu for an extended period of time. Using these data, I calculated the year in which women first stayed in the city for a month or longer.

age	year
5	1961
5	1979
5	1981
9	1981
12	1985
14	1991
14	1991
17	1989
19	1990

Table 5.5: Age and year in which women first lived in Kathmandu for one month or longer.

Table 5.5 illustrates that all the women of Jetthul who ever resided in Kathmandu for a month or longer prior to October 1991, first experienced city living as children and teenagers. More than half the women first resided in the capital as children under the age of 12. Therefore, the majority of these women gained their first extended urban experience at a young and impressionable stage in their development.

In terms of change in female urban residence over time, table 5.5 shows that the first of the women surveyed to reside in Kathmandu for a month or longer did so in 1961. It was not until 17 years later in 1979 (when the road was partially motorable[5]) that other women began

[5] It was in 1980 that the completed road became fully open to public transport. From 1978 when the earthworks were completed, however, 4-wheel drive vehicles began to use the stretch of road to Lamosangu.

extended urban residence. Figure 5.2 illustrates it was only after the local section of the road became open to commercial transport in 1980, that extended urban residence increased among the women of Jetthul. That only two women from Turana and Samche had ever lived in Kathmandu prior to this time suggests the importance of the road in stimulating transition in female urban experience in the Jetthul communities.

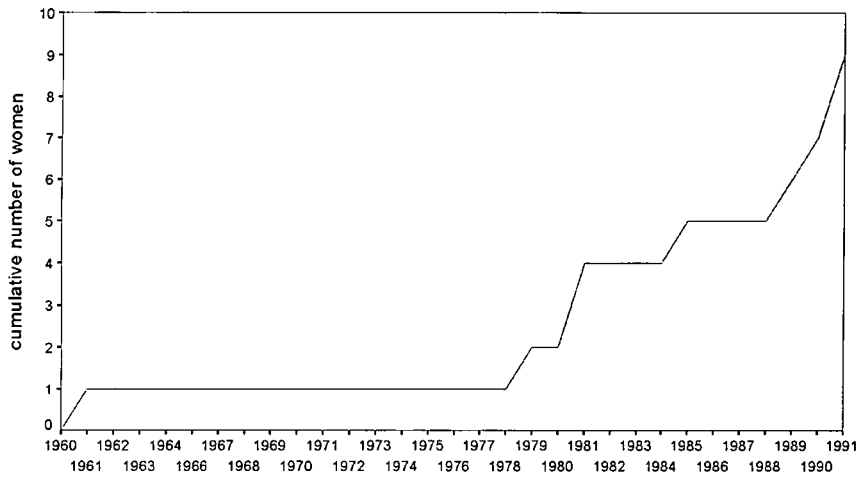

Figure 5.2: Years in which women first lived in Kathmandu for a month or more.

5.5 Experience outside Nepal

Although no one from Jetthul was abroad during my field research, some villagers spoke of personal experience and that of relatives who had lived and worked in India in the past. As set out in the previous chapter, contrary to initial expectations, given the increasing number of Nepalese working abroad in recent decades (Seddon *et al.* 1998:4), there was no history of Jetthul people living and working in any countries other than India.

age in 1991	age visited India	year visited India
49	21	1964
19	0	1972
41	23	1974
21	4	1975
44	39	1987

Table 5.6: Age and year that women first stayed in India.

To quantify female experience outside Nepal, I asked women whether they had ever lived abroad, and about the timing of international experience in terms of their age and marital status at the time. Five women from the sample of 82 (7%) had ever visited a foreign country. All

five had stayed in India as their only experience abroad. Two of the women had experienced India as young children. One was born there and the other went there at the age of four years. Of the three women who visited India as adults, all did so after marriage and between the ages of 21 and 39. All the women who had visited India had accompanied parents or husbands who were employed there. Table 5.6 illustrates the ages at which women first lived in India, together with the calculated year of their arrival.

Table 5.6 and figure 5.3 show that the earliest any of the Jetthul women visited India was in 1964. The majority of women (4 out of 5) visited India before the local section of the road formed a fully functional link with Kathmandu in 1980. Comparing the change in residence patterns in Kathmandu and India over time, a pattern emerges of decreasing experience outside Nepal and increasing exposure to city life within the country.

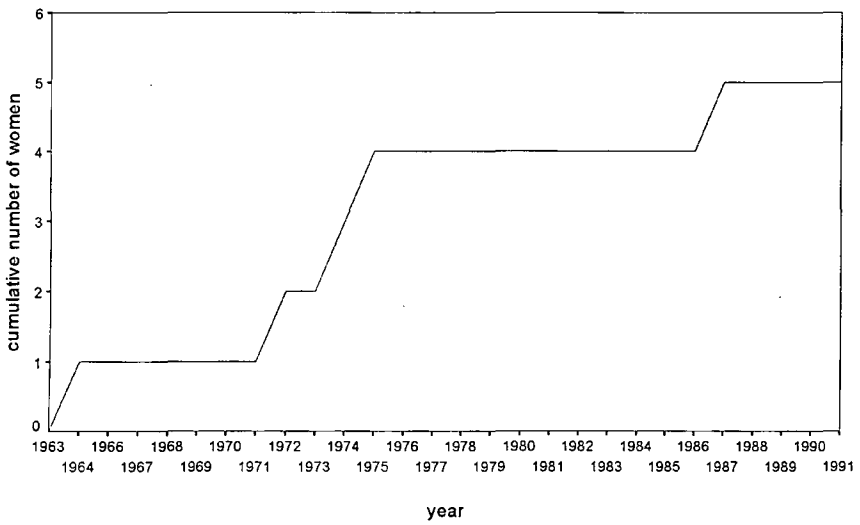

Figure 5.3: Years in which Jetthul women first visited India.

5.6 Media exposure

In addition to travelling outside the village, mass media are a means through which women in rural areas are able to gain information from outside their immediate geographical surroundings. Through radio, audio-visual and printed media, new concepts and aspirations are formed and traditional values challenged, which both directly and indirectly influence social change (Bongaarts & Watkins 1996:660; Watkins 1996:254; Caldwell *et al.* 1988:55). The efficacy of mass media in information dissemination and effecting behavioural change has been put to use in family planning strategies in Nepal (Aryal 1996:89-91; NFHS 1996:6; UNFPA 1996:43-44). Access to mass media is hypothesised to have increased since provision

of the road, both by the increased potential for obtaining more affordable devices such as radio sets and printed materials from urban areas and also from gaining access to audio-visual media such as television, video and cinema on urban visits. It is therefore pertinent to consider the situation of female access to different forms of mass media since construction of the road.

5.6.1 Radio

Radio is regarded to be one of the most influential and accessible forms of mass media in the developing world (UNFPA 1996:43). It is estimated that there are over a million receivers in Nepal, which represents approximately 60 per 1,000 people (Piotrow *et al.* 1994:17). While there is adequate documentation of the rapid growth of audio-visual media in Nepal and other LICs (UNDP 1998:167; Piotrow *et al.* 1994:17-18; CBS 1992:143), micro-level research quantifying actual female exposure to these media is extremely scant. Data concerning audio-visual media exposure in Nepal tend to be confined to quantification of cinema outlets, televisions sets and videos (UNFPA 1996:43; NFHS 1996:12; UNICEF 1992:78,176). Even analyses of cinema exposure among the women of the TFRP (Axinn 1992a) do not include the off-road rural community of Timling nor female exposure to other forms of mass media.

Although many Nepalese families are too poor to own a radio set (Chapagain & Shrestha 1989:144), in most neighbourhoods and communities a radio can be heard. In Nepal, as in many other LICs, radio listening is a public rather than a private phenomenon with neighbours, relatives and friends visiting each other for the purpose of listening to radio programs (Pradhan 1982). Unlike in western countries, in rural Nepal the loud playing of radios is expected and regarded as a generous, sharing gesture rather than a disturbance (UNFPA 1996:43). A single radio effectively has a larger audience in a Nepalese village than in industrialised settings and therefore radio is a very effective means of information dissemination, especially in areas with low levels of literacy, yet a common understanding of the national language (Chapagain & Shrestha 1989:141). In Nepal radio is regarded to be the most popular form of media with the widest coverage (Malla 1983:70). Because of this, radio has been incorporated into the strategy of many development agencies and organisations. From the early campaigns of the Family Planning Association of Nepal (FPAN), radio has been used as an information channel, and regular slots are broadcast on Radio Nepal by the Contraceptive Retail Sales Company and the Family Planning/Maternal and Child Health Programme. Given the importance afforded to radio as a key feature of national population strategy information dissemination, it is particularly pertinent to address the gap in research into female exposure to this medium.

Each morning during my fieldwork, I was woken by my elderly neighbour Hom Bahadur Tamang's transistor radio announcing the news and playing advertising jingles, to which he listened while expectorating and preparing himself for the day's activities. Radios can be heard in the Jetthul villages early in the mornings and during the evenings. As they are played at very high volume, a single household's radio can be overheard by neighbours. During the daytime the villages become silent, however, as houses empty of people going to work in the fields. Radios are not taken out to the fields as this would be impractical for listening and women are reluctant to add any additional weight to the loads of fodder and wood they return home with, therefore exposure to radio is within the village itself.

In order to quantitatively determine women's access to radio, I began by conducting a survey of radio ownership. Each woman was asked: "*Do you or anyone in your household own a radio?*" Of the 82 women surveyed, 74 (90%) lived in households that owned a radio, which was greater than I had estimated from day-to-day experience of radio noise emanating from households. With a high proportion of young men working in Kathmandu since road provision, radio ownership has also risen. Radio and radio-cassette players are regarded as high status gifts, to which young men have easy access in the city and can earn the cash to purchase them from their waged employment. They have therefore become staple gifts from migrating young males returning to visit their natal households.

To quantify how often women actually listened to radio, I asked them to assess their frequency of radio listening using simple categories: "*Even if you do not own a radio, would you say that you listen to radio every day, a few times a week, hardly at all, or never*?"

how often listened to radio	number	percent
"every day"	10	12
"few times per week"	10	12
"hardly at all"	50	61
"never"	8	10
no response	4	5

Table 5.7: Regularity with which women listened to the radio.

Contrary to a high degree of radio exposure that may have been assumed from radio ownership, data presented in table 5.7 show that of the 82 women surveyed, only 24% reported listening to radio programmes with regular frequency. Just 12% of women reported listening to

broadcasts daily and a further 12% said they listened a few times each week. The majority, 61% of women, in the survey reported listening to the radio very infrequently ("hardly at all") and a further 10% reported never listening to the radio. These data illustrate that while road provision has undoubtedly influenced an increase in radios in Jetthul and most households own a receiver, actual listening by the majority of Jetthul women is infrequent. This results from the combination of long working hours in the fields and lack of cash to sustain battery-powered radio listening. This is particularly important, as in the absence of detailed micro-level data on female listening, very general assumptions have been made about radio coverage within communities, based upon ownership alone (Piotrow *et al.* 1994). Given that radio is regarded to be one of the most important and effective means of awareness-raising in Nepal (UNFPA 1996:43; NFHS 1996:12; Chapagain & Shrestha 1989:141; Malla 1983:70), the low listening of the female community of Jetthul indicates poor awareness of radio-disseminated information associated with social change and fertility decline such as child survival (UNICEF 1992:179), family planning (Dahal & Fricke 1998:64-66; INFRAS 1995:15; Axinn 1992a: 514; Tuladhar 1989:9) and female status and well being (UN 1994:23,64; Upretty 1989:8; Janssens 1989:132). This in turn suggests a reduction in the efficacy of a potentially powerful tool in health and family planning promotion in rural Nepal. These findings highlight the need for a reassessment of the assumptions concerning female awareness of radio-transmitted health and family planning messages in order to improve the potency of radio campaigns targeting a female audience.

5.6.2 Literature

While there has been rapid growth in the production of newspapers (CBS 1992:143) and magazines for women in the last few decades in Nepal (Subedi 1993:77), female access to printed matter is low in Jetthul. Indeed, reading materials are not common in Samche and Turana. School children pore over their few school books and some popular magazines are brought to the village by people returning from Kathmandu. After the democratic movement of 1990, I observed more pamphlets and newspapers being read by some of the men, but I never observed women reading.

Information gathering through newsprint by women is constrained primarily by their low level of literacy, which I go on to consider in the next chapter. This highlights the role of illiteracy in hampering news media coverage of women at the village level in rural Nepal (Malla 1983:70). Indeed, most Nepalese publications are prepared for and read by the middle classes that form the majority of the literate population and have an adequate disposable income to

purchase such commodities. While the poster newspaper *Gaon Ghar* ("Village Home") has been established in recent years to provide news in an appropriate format for village communities, it is not distributed in Jetthul. This is due to the lack of coverage by production credit programmes such, as PCRW and SFDP, that ensure distribution in rural areas.

To quantify exposure to print media in Jetthul, I asked women: "*Would you say that you look at or read magazines or newspapers, every day, weekly, monthly, hardly at all or never?*"

how often looked at or read newspapers or magazines	number	percent
"daily"	0	0
"weekly"	2	2
"monthly"	1	1
"hardly at all"	1	1
"never"	78	96

Table 5.8: Regularity with which women read newspapers and magazines.

Data displayed in table 5.8 show that only four women, representing less than 5% of those surveyed, said they had ever "looked at or read magazines and newspapers." Two girls, aged 12 and 13, answered that they looked at magazines on a weekly basis. Of these two, only the 12 year old could read. The only woman who said she looked at newspapers and magazines on a monthly basis was aged 41, and was illiterate. One 13 year old girl, who was literate, reported that she read popular reading material infrequently ("hardly at all").

This illustrates that although the road may physically enable the movement of news print and other literature into rural areas, very few Jetthul women look at printed materials and even fewer can be considered to read them. While this may be due in part to the lack of disposable cash for such purchases and especially in the case of women, a lack of time for reading, in chapter 6, I show that a very low proportion of Jetthul women are literate and are able to read printed media.

5.6.3 Cinema and video

Apart from radio and the few newspapers, pamphlets and magazines that make their way to Samche and Turana, no other forms of mass media are accessible locally. For women travelling to Kathmandu, however, a whole range of audio-visual media are available. For poorly educated rural women whose lives focus on family-centred production within the village, television, cinema and video exposure during urban visits are key to experiencing novel

concepts. Alternative lifestyles and ideas that are vibrantly and positively presented via rapidly developing mass media in Nepal are associated with expanding tastes and consumerism stimulating the adoption of new and foreign behaviours (Leichty 1997:33; UNFPA 1996:44; Watkins 1996:254).

Plate 5.2: Advertising for a Nepali film.

Mass media are more widely available and accessed within urban centres, and cities and towns are 'hot spots' for national and international material.

The increasing accessibility of mass media by Nepalese youth has important implications for social change. In the past rural youth has been presented with clear and consistent messages concerning lifestyle, family and reproduction by senior kin. Popular media in Nepal, however, convey many variations and alternative ways of life. Traditional Nepalese themes of family, kin obligation and responsibility towards parents are not central issues of imported media, which focus on the importance of the experience, consumerism and happiness of the individual. Bista comments upon such themes in the Hindu epic *Ramayana*, broadcast by Nepal TV: "Other people do not count. What counts is your self image..." (1989:30-31). The majority of cinema and video films seen by Nepali women are Hindi romance-action dramas, the set formula of which incorporates beautiful headstrong heroines, self-selection of partners, risqué behaviour and an absence of offspring. Increasing exposure to idealised cinematic unions resulting from love and romance presents an alluring alternative to traditional marriage arranged by senior kin. Indeed, wider female pre-marital experience outside the family sphere is linked to increasing female autonomy in spouse selection (Shrestha 1998:130). Watkins (1996:254) encapsulates the power of mass media upon Nyeshangte youth:

> For this younger generation, the lure of 'imagined' or 'possible lives' is a compelling force that pulls them away from the constraints of tradition and the homeland, and promises them a new world unlike anything their parents might have experienced or dreamed of.

Plate 5.3: A Nepalese film actress.

5.6.3.1 Cinema visits

In spite of the increasing number of Jetthul women visiting Kathmandu, only 10 of the 82 women surveyed (12%) had ever visited a cinema in their lifetime. Indeed, just five of the 24 women (21%) who had visited an urban centre in the preceding 12 months, had been to the cinema during the year. Table 5.9 illustrates that the frequency of cinema visits made by these five women in the year preceding October 1991 ranged broadly from two to 60. One unmarried woman aged 18 years, said she had seen films 60 times in the previous 12 months. This is equivalent to more than one cinema visit a week. Although this figure seems very high, further investigation revealed that she spent frequent and extended periods in Kathmandu visiting her father. As she reported watching videos much less frequently (11 times), I did not suspect her of gross over-estimation of her year's viewing.

number of cinema visits	number of women	visits to city in past year	frequency of radio listening
2	1	"many"	"hardly at all"
5	1	"a few"	"hardly at all"
6	1	"a few"	"hardly at all"
11	1	"many"	"daily"
60	1	"many"	"daily"

Table 5.9: Frequency of cinema visits in the previous 12 months.

Data presented in figure 5.10 show that apart from one woman who was 29 when she first visited the cinema, most women were at a highly impressionable stage in their lives, in their teens or younger, and the majority of women were unmarried at the time of their first visit, which has strong implications regarding influences driving social change.

current age	age at first cinema visit	marital status at the time
19	5	never-married
13	12	never-married
16	13	never-married
18	13	never-married
14	14	never-married
21	15	married
19	15	never-married
22	17	never-married
20	19	married
39	29	married

Table 5.10: Age and marital status at first cinema visit.

To examine cinematic experience within the timeframe of road provision, the year in which individual women saw their first film was calculated using their age at the time. This is illustrated in figure 5.4, which shows the earliest any of the women in Jetthul saw their first cinema film was in 1977 when the earth works of the road were nearing completion and there was limited traffic (four-wheel drive vehicles) connecting with the Arniko highway and Kathmandu. It is also apparent that it is only from the early 1980s, when road construction was complete and a commercial bus service was operational that cinema viewing began to increase among women of Samche and Turana.

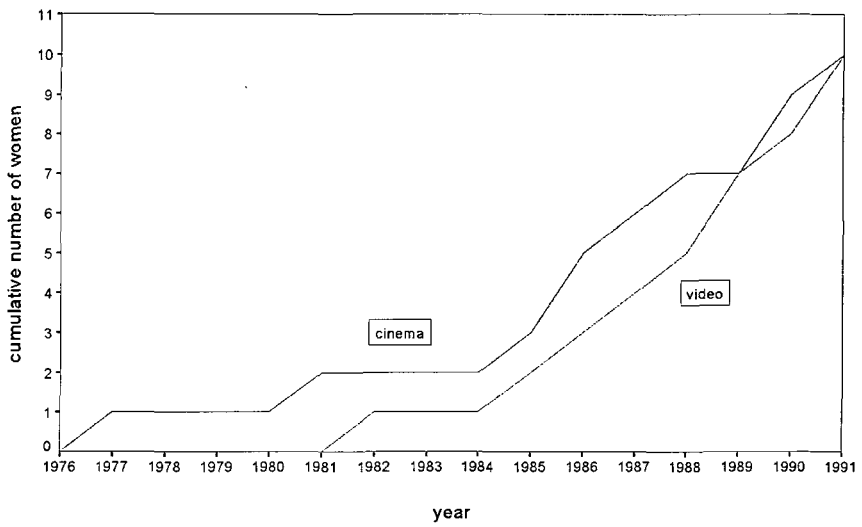

Figure 5.4: Years in which women first experienced cinema and video.

5.6.3.2 Video exposure

While there are no videos or television sets in either of the Jetthul villages, during visits to urban areas women are able to access these forms of information and entertainment. With the growth in the number of television sets in Nepal in recent years (UNDP 1998:167, Piotrow *et al.* 1994:17-18; CBS 1992:143), video ownership and satellite reception have also increased, providing a wider range of entertainment within the home (Wilmore 1997:98; Bhattarai 1989:13). Additionally, the influx of cheap pirate video cassettes from Thailand has reduced the cost of viewing. Some entrepreneurs have established small commercial video 'theatres' and others 'sub-let' their satellite reception (Wilmore 1998:8), which have increased the accessibility of foreign media to a broader Nepalese audience (UNICEF 1992:178). Until the last few decades the majority of mass media were accessed mainly by the wealthier, educated echelons of Nepalese urban society (Tuladhar 1989:9), increasingly the less-wealthy also have access to television and video.

During their stay in Kathmandu women spend time visiting city-dwelling friends and relatives, some of whom own televisions and videos. Like at the cinema, one of the most popular forms of home viewing is Hindi romance action movies, although the televised Hindu epic *Mahabharata* and western music satellite channels are also popular. Like the cinema, home audio-visual media commonly present alternative ways of life and concepts of women and female conduct that differ from traditional values. As much of televisual media is uncensored at the national level, these media are often sexually explicit.

current age	age at first cinema visit	age at first video screening
19	5	15
13	12	13
16	13	13
18	13	12
14	14	14
21	15	19
19	15	17
22	17	17
20	19	19
39	29	30

Table 5.11: Age of women when they first experienced cinema and video.

Quantitative surveying showed that slightly more women experienced television and video than visited the cinema. Of the 12 women (15%) who had watched a video, only 10 of them gave the age at which they first had this experience. Table 5.11 shows that all of these 10 women had seen both cinema and video. That some of the women experienced their first video at a slightly later age than cinema reflects the more recent introduction of video as a popular form of entertainment and the more established nature of cinema in Nepal. In terms of frequency of video exposure, only five women (6%) reported seeing a video in the 12 months preceding the survey. Data presented in table 5.12 illustrate that the number of occasions these women viewed a video ranged between two and 11. Comparing home video with public cinema viewing, two more women experienced video than cinema, but slightly more women experienced cinema with greater frequency than video. It appears that while video is more accessible to Jetthul women during urban visits, cinema is more popular among a number of the women. It is apparent that the majority of the women accessing audio-visual media during city visits have substantial exposure to it.

Figure 5.4 shows that female exposure to video, like the majority of cinema viewing, has taken

place since 1980 when the local section of road was completed, linking Jetthul with Kathmandu. Given that cinema has been established since 1951 in Kathmandu, there is compelling evidence that road provision has had a marked enabling effect upon female access to popular audio-visual media.

number times watched videos	no. of women
2	1
3	2
5	1
11	1

Table 5.12: Frequency of video exposure in previous 12 months

That the majority of audio-visual media experience has been gained by unmarried girls and teenagers since the advent of the road, suggests that it has facilitated increased exposure to novel ideas at an early and impressionable stage in women's lives. The timing of female exposure to alternative lifestyles conveyed by audio-visual media is crucial in the adoption of non-traditional and novel concepts concerning ways of life affecting fertility. In Nepal, as in many other societies, attitudes concerning reproductive behaviour and lifestyle are formed early in life, before marriage (Aryal 1996:89). Given that mobility of rural Nepalese women becomes constrained by increasing responsibilities following marriage (Fricke *et al.* 1991:49), and that media exposure within the village setting is particularly limited, this early experience is important to accessing information and broadening perspectives beyond the boundaries of family and village tradition.

5.7 Comparison with the Tamang Family Research Project

5.7.1. Places of residence outside the village setting

Comparing quantitative data concerning female urban residence, distinctive patterns emerge across the three Tamang communities. Table 5.13 shows that very similar proportions of the older ever-married women experienced extended pre-marital residence in Kathmandu. Another striking similarity is a marked increase in residence in the capital among the young generation of pre-marital females in all settings, a greater proportion of whom have lived in Kathmandu for a month or longer than the ever-married cohort prior to their first marriage. Over time, the proportion of pre-marital female residence in Kathmandu has more than doubled in off-road Timling and more than tripled in Jetthul and on-road Sangila. The more marked increase among women of the on-road and near-road communities undoubtedly reflects better access enabled by road provision.

ever-married

		near-road	off-road		on-road	
		Jetthul	Timling		Sangila	
		female	female	male	female	male
Kathmandu	before marriage	6	6.9	9.7	6.9	21.8
	after marriage	6	12.2	20	6.9	28.3
Outside Nepal	before marriage	4	3.2	17.1	0.2	9.4
	after marriage	6	9.6	36	0.4	14.0
Pokhara/Terai	before marriage	0	11.7	16	1.2	7.0
	after marriage	0	10.1	25.1	1.8	18.1

never-married

Kathmandu		21	17.0	28.4	26.3	29.3
Outside Nepal		4	6.4	10.8	0	4.5
Pokhara/Terai		0	10.6	20.3	3.0	7.5

Table 5.13: Percentage of women (and men in Timling and Sangila) residing outside the village for periods of a month or longer, according to marital status

Among the older, ever-married women of Jetthul and on-road Sangila, exactly the same percentage resided in Kathmandu for a month or more, before and after their first marriage. Among the older, ever-married women of off-road Timling, however, extended residence in Kathmandu almost doubled following marriage. Overall residency outside the village, however, increases after marriage and is most marked among the men.

Comparison with TFRP data indicate that like women in Jetthul, those of rural, off-road Timling also exhibit lower urban residence than their male counterparts. In peri-urban, on-road Sangila, however, gender disparity in city living is lower among the younger generation (Fricke *et al.* 1991:49,75). My primary field research in Jetthul, together with secondary analyses using TFRP data indicate that rural women do not participate equally with men in the increased travel and residence away from the village facilitated by communications development. This aspect of movement and migration is common among Tamang and other of rural communities where economic necessity has driven male labour migration (Watkins 1996:254; Miller 1990: 57; Dahal 1989:83; IDS 1986:7).

In Timling there is greater overall variation in places of residence outside the village, compared with Jetthul and Sangila, where much lower proportions of the population have lived in locations other than their home village or Kathmandu. In Timling, much higher proportions of men and women of all cohorts and marital states have experience of living in Pokhara and the Terai and countries outside Nepal, which Fricke *et al.* (1991:48) attribute to them being traditional labour destinations for Timling people. Although variation in places of residence

has persisted over time in Timling, there has been a shift in the relative importance of location, with higher proportions of younger pre-marital men and women living in Kathmandu than all other destinations. This is a marked change from their older ever-married counterparts, greater proportions of whom resided in locations other than Kathmandu.

In Jetthul and on-road Sangila residential location patterns outside the village are similar. Among both older and younger generations, Kathmandu has remained the primary place of residence outside the village for both pre- and post-marital men and women of both cohorts. This may be due to the direct access communities have to the capital following road provision.

My investigation of female experience outside Nepal shows that very few Jetthul women had ever visited another country and all international experience was in India. While there is evidence of general broadening of female experience outside Jetthul, it has become centred on Kathmandu and female experience outside the country has declined in recent years. This trend in Jetthul is also apparent in both on- and off-road communities of the TFRP (Fricke *et al.* 1991:49,75), and reflects changing patterns of male economic migration, set out in chapter 5.

5.7.2 Media exposure

Unfortunately for comparative purposes, TFRP data pertaining to media exposure have not been fully published to date. Some data quantifying cinema-going among the on-road peri-urban community of Sangila have, however, been analysed by Axinn (1992a), who presents cinema exposure prior to marriage as a proportion of five age cohorts.

age	Sangila[6]	Jetthul
under 25	31	18
25 - 34	14	0
35 - 44	9	4
45 - 54	0	0
55 - 64	0	0

Table 5.14: Percentage of each female age cohort that saw a film prior to marriage

Presenting cinema experience in Jetthul in this way, table 5.14 illustrates a similar pattern of exposure to cinema among younger women in both the on-road and near-road settings. Experience of cinema is highest among younger pre-marital women in both settings and

[6] Source: Axinn (1992a:513).

confined to women under 45 years of age. While the lack of cinema experience of older cohorts in Jetthul may be attributed to difficulty of access prior to completion of the road in 1980, women in the on-road peri-urban setting of Sangila would presumably not have shared the same geographical constraints to cinema viewing. Given that public cinema has been established in Kathmandu area since the early 1950s, it is pertinent that in the on-road peri-urban setting, cinema experience is lowest among older women. These combined findings suggest that urban proximity and physical access provided by road transport are not the only factors determining female experience of cinema, but that broader ongoing social change has contributed to the rise in this activity.

5.8 Discussion

The research I have presented in this chapter was undertaken with the primary objective of assessing changing patterns of female exposure to life outside the village since the advent of the road. This is an important aspect of the process of social change, given the central role attributed to broadening life experience in modern fertility transition theory (Dahal & Fricke 1998; Bongaarts & Watkins 1996; Axinn 1992a; Caldwell, Reddy & Caldwell 1988). The previous chapter illustrated a situation in Jetthul of intensifying male economic migration and urban contact in recent years, with correspondingly low female work experience outside traditional family-centred agrarian production. In the course of this chapter I have shown that, while women do travel outside Jetthul for non-work purposes, overall annual travel and urban contact among females is lower than that of males, with 29% of women visiting an urban centre in the 12 months preceding October 1991. It has become apparent from quantitative field work, therefore, that the initial interpretation of road impact monitoring studies (INFRAS 1991a:128), set out in section 5.1, provide a far from accurate account of road use. I have shown that the increased mobility following provision of the road is not equivalent to one return journey per resident per year, but that the reality is one of gender disparity in human movement. Whereas Jetthul men travel more frequently by road and for the principal purpose of cash generation, female road travel is primarily for social reasons. While the road enables male travel for labour migration, it has become clear that it does not directly serve female domestic and agricultural transport needs and Jetthul women continue the majority of their daily travel and transport on foot, like the majority of rural Nepalese women (Ghimire 1999:12-19). Although Tamang culture is permissive regarding female mobility, women are restricted in their wider experiences beyond the village enabled by road provision by their poverty (Caplan 1997:622) and central role in domestic and farm production. While gender and road use in Nepal remains under-researched to date, the situation in Jetthul reflects that

observed in rural Dhading District (Seddon & Shrestha 1998:39) and other LICs (Fernando 1998:67; Porter 1995b:71), where regardless of cultural determinants of female mobility, women's use of motorised road transport is lower than that of men.

Gender inequalities in road use in Jetthul are also apparent in experience of extended urban exposure. Similar patterns to those in Jetthul are also evident among the TFRP communities, reflecting a broad trend of male migration for work and greater male extended residence outside the village.[7] There is also a marked increase across all three settings in the extended residence of pre-marital females outside the village in recent years. Across all three settings there is also evidence of generational disparity in extended residence in urban centres, illustrated by the marked increase in unmarried girls staying in Kathmandu for periods of a month or more. This reflects social and economic transformations that are most advanced in the peri-urban, on-road setting, where female extended residence outside the village is highest and at greatest parity with that of male counterparts. Furthermore, the higher proportion of pre-marital female city residence exhibited by the Jetthul women, compared with those of rural off-road Timling, reflects the dramatic impact of the nearby Lamosangu-Jiri road in stimulating processes of changing mobility in the Jetthul community since 1980.

Even though Jetthul women do not travel by road to the extent that their menfolk do, female personal travel by motorised transport to Kathmandu has increased with road provision, a trend that has been observed elsewhere in Nepal (Seddon & Shrestha 1998:42-43). Since completion of the road there has been a marked increase in the proportion of younger, pre-marital females experiencing city life with extended periods spent in Kathmandu. The proportion of pre-marital residence in Kathmandu for a month or longer has tripled between the older and younger cohorts, and only women under 35 years of age (the majority of them under 21) have ever stayed in Kathmandu for a month or more in their lifetime. The markedly lower extended residence of married women in Kathmandu again reflects their greater workload, obligations and responsibilities that anchor them to the village. Although, overall, women in Jetthul are not as mobile as their male counterparts, there is evidence of a gradual increase in pre-marital mobility and urban residence among younger Jetthul women. As the majority of female residence in Kathmandu has been experienced since the Lamosangu-Jiri road became functional, there is strong evidence that the road has stimulated an increase in both temporary and extended exposure to urban centres. Furthermore, the nature of female road travel, unlike

[7] Quantitative data is presented only for the TFRP communities. Ethnographic determination of the level of male migration in Jetthul is presented in chapter 4.

that of their menfolk, is mainly for social reasons, a trend that has been noted among women elsewhere in Nepal following road provision (Seddon & Shrestha 1998:42-43). This also suggests a shift in the social and economic circumstances surrounding the women of Jetthul that has led to increased urban exposure among young, pre-marital women. Considering that exposure to urban life is associated with increased exposure to mass media (Caldwell *et al.* 1988:55,57; Piotrow *et al.* 1994 21-22), changing aspirations, rising consumerism (Aryal 1998:74; Leichty 1997; Bongaarts & Watkins 1996:660; Hayes 1993:102) and decreased control of wider family members (Watkins 1996:254; Axinn 1992a), this has important implications for the Jetthul community.

While there is adequate documentation of the rapid growth of audio-visual media in Nepal and other LICs (UNDP 1998:167; Piotrow *et al.* 1994:17-18; CBS 1992:143), micro-level research quantifying changes in female exposure over time is extremely scant. Data concerning audio-visual media exposure in Nepal are confined to quantification of cinema outlets, televisions sets and videos (UNFPA 1996:43; NFHS 1996:12; UNICEF 1992:78,176). Even analysis of cinema exposure among the women of the TFRP Axinn (1992a) does not include the rural off-road community of Timling, nor female exposure to other forms of mass media. Indeed, there is a dearth of research addressing changing female exposure and mass media following road provision. Considering the important enabling effect road transport may have on rural women accessing mass media and its potency in stimulating social change, the use of micro-level field research in Jetthul has addressed the gap in qualitative and quantitative data concerning the early process of female exposure to wider experience facilitated by the development of road communications. As a result of improved transport, a broadening spectrum of the population of LICs come into contact with new and foreign ideas and values (Cleland *et al.* 1994:80; Blaikie *et al.* 1977:71). The increasing exposure of Jetthul women to urban life and mass media in their formative years has desirable demographic associations. From their earlier work on the central importance of social change in demographic transition theory, Caldwell & Caldwell have regarded the adoption of foreign concepts of family as crucial to demographic change and fertility decline in LICs. Developing intimacy within marriage, concentration of resources within a nuclear family structure and reduction of traditional obligation to extended family are argued to be key to change in the perceived value of children and adoption of family planning (1976:384). Indeed foreign media of the kind favoured by young people in Nepal focus on *romance* in relationships rather than *reproduction*. Mills and Boon paperbacks that have become popular reading for educated (male and female) youth in Kathmandu are a case in point. These romances subtly, yet powerfully, challenge the basis of traditional Nepalese

marriage and family life. For many Nepalese peoples, ideal unions are traditionally formed through familial arrangement and result in the early birth of a child followed by continued fecundity (Tuladhar 1989a: 29; Dahal 1989:78). These novellas, however, convey three key themes to their readers: 1) personal choice of partner, 2) romance and love as prerequisites of marriage, and 3) ideal marital fertility is limited. The latter is encapsulated in McAleer's examination of the evolving ethos of the publishing house:[9]

> The Mills & Boon editor altered the reference from four kids to two... she admitted she was 'one of the growing number of people who are desperately worried about over-population', and Mills & Boon could do something about it... 'For this reason I am reluctant to let any suggestion creep in that every nice girl ought to want as large a family as possible...' (1999:265).

Indeed, fertility limiting behaviours and lack of family control over individual choice are implicit in western media culture, and form the foundations of hedonistic lifestyles of media heroes and heroines. Nepalese youth consumers of foreign media and entertainment are, therefore, exposed to the alluring western ideal of marriage based on romance, sex and personal experience, not reproduction, family control and obligation.

Changing experience among young women from the traditional village domain and family centred life to more cosmopolitan experience has strong implications within the theoretical framework of social change. Exposure to urban and foreign lifestyles, through actual contact or via mass media, is an important stimulus to social change and the diffusion of development innovations associated with the uptake of family planning services (Niraula & Lawati 1998; UNFPA 1996:44; Axinn 1992a). Increasing experience of young people outside senior family control is associated with a shift away from traditional attitudes and more personalised conduct (Dahal & Fricke 1998:69; Watkins 1996:254; Axinn 1992a: 518) and broadening aspirations (Leichty 1997:33; Aryal 1996:89). The powerful influence of international mass media in introducing foreign lifestyles and integrating novel commodities, while transforming cultural identities and individuals'

Plate 5.4: Young women demonstrating for the democratic movement outside the King's palace in April 1990.

[9] This is an extract from correspondence concerning a female editor's alteration of the number of children an author attributed to her heroine, in a manuscript in 1972.

relationships within them, is acknowledged both at the academic (Spitulnik 1993:294; Subedi 1993:75-77) and grass-roots level (Caldwell & Caldwell 1988:23). Later in this thesis I consider whether there is evidence of social change detectable in increased female autonomy in the marriage process (in chapter 7) and ultimately, in reproductive behaviour and fertility (in chapter 8).

While there is evidence that 'western' concepts absorbed through urban contact and conveyed via the media boom stimulate social transition (Aryal 1998:86; NFHS 1996:10; Subedi 1996:49, 53; Joshi 1993:65; Hayes 1993:92), in rural communities, conflict between tradition and social innovation has led to erosion of family support systems and rejection of cultural identity (Watkins 1996:255; Caldwell *et al.* 1988:57). Growing resistance to sanction of elders engenders degeneration of extended family ties and positive aspects of social control, with less progressive aspects of modern life becoming apparent in rural Nepal. Social problems such as drug dependence (Watkins 1996:252), alcoholism and gaming (INFRAS 1995a:102-3), previously associated with city life, are increasingly encountered in rural communities, where they have become growing sources of misery and resource depletion. The power of mass media in developing youth identity and fashion cults (Campbell 1997:220; Leichty 1997) is also apparent in the increasing involvement of Nepalese youth in "street gangs" (Watkins 1996:252). Increasing monetisation of rural areas is linked to declining traditional exchange and replacement with cash transactions (UNFPA 1996:44), which the previous chapter showed to be increasing among young Jetthul women. This together with the diffusing culture of self-interest, has led to a reduction in family and community co-operation in some rural areas (Watkins 1996:255; INFRAS 1991:182), although as I showed in chapter 4, this is not in evidence in Jetthul. Expanding tastes and growing consumerism that have led to a more consumer-based perception of status in Nepal (Leichty 1997:33) are also associated with changing spending patterns and a new vulnerability to inflation (Schuler & Goldstein 1985:4). Rather than improving living standards in rural areas such as Jetthul, this has the potential to increase dependency upon male economic migration, which in turn, increases the female agricultural work burden.

Gains in female empowerment that may be influenced by growing media and urban contact are also offset by a shifting perception and increasing commoditisation of women (Acharaya 1995:161), as traditional Nepalese concepts of women are challenged by foreign stereotypes conveyed in sexually explicit material transmitted by satellite television, video, the Internet and magazines (Bista 1989:30). While the rapid absorption of foreign values and aspirations may

bode well for creating a demand for family planning and fertility decline in developing countries (Cleland *et al.* 1994:82), social change is also evident in the rising tide of political conflict and unrest in Nepal in the last decade. Indeed, mounting aspirations, in the increasingly monetised urban environment, are factors considered to have both fuelled and been expressed in the popular uprising that led to the formation of democratic government in 1990 (Hayes 1993:102). These factors also drive the rapidly growing national and international sex industry. Increasing frequency of exposure of young, impressionable Jetthul girls to mass media and city life poses an escalating risk of their being enticed into commercial sex work. The combination of their increasing presence in the capital, together with rising aspirations stimulated by rising media exposure, renders them vulnerable to the lure of sophisticated procurers and traffickers.

Chapter 6

Schooling and literacy skills

Education is one of the most important means of empowering women with the knowledge, skills and self-confidence necessary to participate fully in the development process.
International Conference on Population & Development 1994:23

Let us educate a woman: let us educate a nation
International Literacy Day slogan 1991

No nation goes bankrupt educating its people
Confucius

6.1 Introduction

In low income countries such as Nepal, literacy and education form a major route through which individuals and communities access information, deal effectively with officialdom, broaden their employment horizons beyond the agricultural domain and are empowered within the national constitution. In such settings schooling, of women in particular, is positively associated with improving health indices and declining population growth rates (Aryal 1998:89; Sen 1997:10; LeVine *et al.* 1994; Mason 1993:39). Furthermore, the quality of women's lives is enhanced by personal empowerment acquired with education, which increases reproductive autonomy and the uptake of family planning services (Shrestha 1998:141; Mensch & Lloyd 1997; Jejeebhoy 1995:69). As I set out in section 1.4.1, all the substantial reviews of world fertility and education suggest female schooling to be a major factor in fertility transition in developing countries (Jejeebhoy 1995; Cochrane 1979). Education has, therefore, progressively become a major factor in mortality and fertility transition theory (Caldwell *et al.* 1988), although some debate its importance where the quality of schooling is

poor (Cleland, Phillips, Amin & Kamal 1994; Tan & Hains 1984).

Within theory of social development and fertility transition, technological innovations such as the motorisation of transport have been argued to be major determinants of improving children's access to education in LICs (Caldwell *et al.*1988:167). Road construction is assumed to render educational facilities more accessible by enabling both the provision and support of educational establishments and their staff (Richards 1984:15), together with improving physical accessibility for potential pupils (Sainath 1995; Rao 1994). As the road has connected the Jetthul community with urban centres, where there has been a marked increase in female schooling and literacy in recent decades (CBS1995:381), and given the role of roads in the theory of urban-rural diffusion of development trends (considered in section 1.3), it may be hypothesised that there might be evidence of an increasing proportion of Jetthul girls attending school since construction of the Lamosangu-Jiri road. Although there is evidence that road provision increases the rate of female participation in education in LICs (Khandker *et al.* 1994; 19,23) including Nepal (Shrestha 1998:14), links between the two variables are complex and this area has been poorly researched to date. Given the strong association between female education and fertility decline, and that early project objectives stated that the success of the LJRP/IHDP would in part be apparent in improvements in the literacy rate and SLC passes (Basler & Hofman 1975:11), consideration of educational change in Jetthul since road provision is warranted. This chapter therefore provides a situation analysis of educational opportunities, female schooling and literacy skills in Jetthul. Observations and analyses consider whether there is evidence of detectable change in women's participation in education since construction of the Lamosangu-Jiri road.

6.2 Objectives

In order to provide a situation analysis of female education in the Jetthul community and to determine whether there is evidence of detectable change since road provision, I set out to:

- chart female uptake of school places over time to provide an indication of changing patterns in female schooling in relation to road provision;
- ascertain the efficacy of education, measured in terms of the educational outputs of reading and writing ability as an indicator of whether potential improvements in school provision and support enabled by the road have resulted in detectable improvements in teaching and learning ;

To further consider evidence of changing patterns of female access to education since the advent of the road, I also:

- quantify the duration of girls' schooling and establish whether those that enrolled in school continued to completion of primary education;
- examine the timing of education in girls' lives;
- assess grade completion in order to gain an impression of the degree and continuity of schooling;
- examine school drop-out and identify factors influencing curtailment of education.

6.3 The school environment

The school in Jetthul, illustrated in plate 6.1, was opened in 1962, 14 years before road construction commenced. Based in Samche village, it serves many of the villages in Jetthul Village Development Committee and is most easily accessed by children of Samche and Turana. The school offers grades 1-5, 1st grade being the entry point for children usually aged four or five, and 5th grade being the final year for the oldest pupils. The grades offered effectively provide the complete range for primary schooling. Secondary education is not available in Jetthul, although children can attend the secondary school in Thulopakhar, 10 km west along the road, which teaches up to School Leaving Certificate (SLC) level. This is the national secondary school qualification in Nepal, taken in the 10th and final grade, which Watkins (1996:267) defines as equivalent to the American High School Diploma. While grades 1-5 of primary education became free under the National Education System Plan in the early 1970s, secondary schooling still incurs fees. Attending secondary school in Thulopakhar on a daily basis would involve 1.5 hours climb up the steep track to the road head at Goli, then a further 1.5 hours walk along the road. Frequent buses cut the road journey time to less than 10 minutes, but this requires payment of a bus fare equivalent to half an adult male's daily cash wage for labour. This, in addition to the cost of fees and school materials, is prohibitive for Jetthul households.

Plate 6.1: The school in Samche.

Plate 6.1 illustrates the basic structure of the school building. Constructed from stone and mud, it has shuttered windows with no glass panes. The school is not electrified and as daylight is

relied upon, the shutters are kept open during teaching hours. Classrooms are quite dark and the open windows provide entry for young goats, whose habit of jumping in and out of classrooms distracts pupils and disrupts classes. Many children are poorly clothed, and as there is no form of heating, during cold weather they spend the lessons shivering to keep warm. The only facilities in the classrooms apart from chalkboards are wooden benches. A single latrine had been constructed in recent years, although its lack of privacy and neglected upkeep discourage its use.

Throughout my fieldwork the school was staffed by a headmaster and four male teachers. All the school staff came from outside the area and none of them were Tamang. None of the teachers had attended formal teacher-training courses and one of them had only studied to SLC level. The staffing situation is typical of many schools in rural Nepal, where specific teacher training and a higher education are not prerequisites to securing teaching posts (Subedi 1993:39; Mali 1982:87) and staff tend to be higher caste and male (Shrestha 1998:14; Subedi 1993:39). Children attending the school are of mixed ethnicity, the majority being Newar, Chetri and Tamang and boys outnumber girls by a ratio of about three to one. According to the headmaster, 200 pupils were enrolled at the school, although my observations indicated a much lower actual attendance. The number of pupils in the school varies markedly according to the season. During periods of peak agricultural activity most children work alongside their families in the fields.

Plate 6.2: A view of a classroom through a window.

Having been asked by the headmaster to assist with English teaching, I participated in the classroom on occasions, which provided an excellent opportunity to observe the teaching and learning experience from within the school. Although teachers do their best under circumstances of very low resourcing, their lack of formal teacher-training is evident in the poor range of teaching methods and reliance upon learning by rote. Apart from chalkboards, there are very few teaching materials. There is no library and many children, some of whom do not have writing materials, share very few textbooks. Although the school has a playground area, there are no games facilities whatsoever. The lack of facilities in the Jetthul is by no

means unusual, but reflects the poorly equipped state of many of Nepal's rural schools (Manandhar 1982:36).

Apart from the primary school in Samche, there were no other educational or literacy facilities in Jetthul throughout my fieldwork. Very occasionally, some children are taught to read and write informally by older male relatives. There are no local NGO or government initiatives to increase female participation in schooling, such as the *Education for Girls and Women* programme or out-of-hours teaching such as *Cheli Beti* or *Shiksha Sadan*. Because there are also no local adult classes, the primary school remains the only formal opportunity for learning and gaining literacy in the local villages. As the school was constructed over a decade before the road and educational facilities have not been further developed since this time, it appears that road has had very little impact upon educational provision beyond improving transport of teachers from outside the villages.

6.4 Tamang perceptions of schooling and education

The availability of local schooling is relatively recent for many of Nepal's rural communities. In Jetthul, primary education has only been locally accessible in the last four decades and therefore schooling and formal education are not a traditional aspect of Tamang childhood in this community and literacy is low, especially among women. The Tamang of Jetthul hold a broad spectrum of opinions concerning the value of education and its relevance to their own and their children's lives.

Although the official school day begins at ten in the morning and ends at three in the afternoon, in reality, teaching and learning time is much shorter than school hours might suggest. Teachers often arrive late in the morning and dismiss classes early in the afternoon and it is not uncommon for staff to send children on errands, or for the whole class to be assigned unstructured and unsupervised play. As all the staff originate outside the villages, teaching and learning time is further reduced by schoolmasters' absence for family and official business. On numerous occasions throughout the year, children arrive to find the school closed for Hindu holy days and national festivals. Parents are therefore aware that in sending their children to school, for a significant proportion of school day, they are not being taught. Although primary school is free, relinquishing children's agro-pastoral labour input, assistance in the home and their role as care-takers of younger siblings, represents a substantial sacrifice for households. Struggling with intensive work schedules, some parents feel that the actual time during which children are taught, does not adequately compensate for the loss of their labour during school

hours: "Why send them to school for them to spend the day playing?" Additionally there is a conflict in timing, as children ideally commence school around the age of five, just as they are regarded to be sufficiently mature to make a contribution to the household, by caring for younger siblings and carrying out simple household chores.

The school teaches according to the National Curriculum, which is structured to promote loyalty to the crown and Hindu commonalty. In addition to literacy and numeracy, subjects taught include history, English and Sanskrit, and textbooks have a strong Hindu theme. The academic, nationalistic nature of the curriculum and lack of vocational training are regarded by some parents and senior household members to have little bearing on Tamang life. Whereas education is crucial to social and economic integration among industrialised and some urban Nepalese societies, it has not traditionally occupied the same role in Tamang society in Jetthul. Together with the ownership of land and livestock and agro-pastoral production, success is perceived in relation to raising a family with a healthy complement of sons to work the family farm and maintain the household economy in parents' declining years.

In spite of the somewhat erratic school structure and lack of vocational teaching, many parents and grandparents regard schooling to be modern and progressive and to have the potential to positively impact upon the community's development. As such, they express the belief that education is "good" for children. It is felt that it is important for boys to become literate and numerate in order to gain better paid employment and "so they are not cheated" and taken advantage of by sophisticated urban folk during migratory labour forays. Whereas adults are clear as to why schooling is beneficial for boys, they are less able to express specific advantages to girls, simply perceiving it to be "good" *per se.* The benefits of schooling daughters are intangible for many Tamang, as girls who attend the village school grow into women who care for their families, tend livestock and work in the fields, the same as their uneducated peers. As I illustrated in chapter 4, unlike their brothers, Jetthul girls and women do not take up employment and trade opportunities outside the village. As such, there are no concrete benefits offered in return for relinquishing girls' labour in order that they may go to school. This is compounded by the custom of sons, not daughters, continuing to contribute to their parents' household economy after marriage and eventually supporting them in old age. In a society where all available manpower must be mobilised to maintain domestic agricultural production, there are no apparent economic or social advantages for families sending girls to school. As one Jetthul father commented, "Why would I send my daughters to school? There is nothing here for them to earn money from education." Because girls' skills and labour

potential are directed towards their future husbands' households, families are strongly aware that any investments in girls are lost to them after their marriage. The comment of one father, during discussion of the probability of his daughters' attending school, epitomised the attitude of many Tamang parents and grandparents in Jetthul: "Should I send them educated to another place [their future husbands' households]?"

Even where families have a strong desire for their daughters to benefit from primary schooling, girls usually only attend when their families are established and their households have a sufficient complement of resident members to satisfy domestic and farm labour requirements. Girls who are first born are therefore much less likely to go to school than those who are born the last of their siblings, as older girls are needed to help their mothers care for younger siblings. The attendance of those enrolled in school tends to be erratic, as they are drawn back into the household workforce more frequently than boys, as seasonal and occasional labour demands increase, such as on occasions when the labour force is decreased due to adult illness or absence from the village. As a result, girls may drop out of school altogether, especially if household labour dynamics change due to a reduction in manpower (as a consequence of migration or mortality) or the birth of a sibling who requires care, in order that adult female members can continue working the fields.

Some parents and senior kin also express concern that by attending school, girls become different and are potentially more difficult. Whereas the literacy, confidence and knowledge gained through education are perceived to be positive attributes for sons, there is concern that girls may become troublesome for their future in-laws. As school attendance, especially for girls, is a very recent phenomenon in Jetthul, there are few role models by which parents can gauge the possible outcome of educating their daughters.

Like children everywhere, those in Jetthul express a mixture of feelings about school. Some attend with enthusiasm, especially those who are bright and favoured by their teachers. Others dislike school, finding it boring, and are uncomfortable sitting for long periods on benches to which they are not used. Children who do not have a good relationship with their teacher experience more frequent punishment and may be reluctant to go to school.

Having described the school in Jetthul and the attitudes, perceived costs and benefits of educating children within the Tamang community, I now turn to more quantitative examination of girls' participation in the local school as an exploratory tool to reveal patterns of female education in relation to road provision in recent decades.

6.5 Profile of women who attended school

The *post hoc* nature of this study presents problems in the quantitative consideration of female schooling within the context of road provision. As women have both married into and out of Jetthul since the school was built, accurate accounting of changes in education of Jetthul women could not be achieved. Of the 82 women who took part in the formal survey, 43 had married into Turana and Samche, having grown up in other villages nearby. Although it would have been desirable to obtain data concerning schools in the natal villages of incoming women, together with the educational histories of women raised in Jetthul who subsequently married out, the logistical complexities of tracking all incoming women's childhood access to primary education precluded such detailed investigation. As I showed in section 2.4.4 and later expand upon in chapter 7, due to the local nature of kin and social networks pivotal to marriage arrangements and because women tend to refuse to marry into families situated further than a day's walk from their natal village,[1] the majority of incoming women were raised close to the Jetthul area.[2] The majority of women therefore grew up within or near the LJRP/IHDP project area, near the road to varying degrees.

Although data of school coverage in Nepal are greatly lacking, there is evidence that the government's 1987 *Basic Education Needs Policies*[3] objective to provide one school within a 1.5 km radius of hill settlements has been implemented successfully. Furthermore, since the early 1980s there has been at least one school constructed in each Village Development Committee nationally (Shrestha 1982:65). Because of the close geographical proximity of their natal villages, it may be assumed that all Jetthul Tamang women experienced broadly similar access to school and influences from the road during their formative years.

While just over half the study sample is comprised of women who were born outside Samche and Turana, use of their ethnographic and survey data provides a valuable *indication* of changing attitudes, which together with social and economic dynamics, mediate female school attendance. Considering the importance of roads and personal mobility in the diffusion of development trends from urban to rural areas (Caldwell *et al.* 1988:55), it is important to address changes in female schooling and literacy, which are pivotal in theory of fertility decline in LICs (Sen 1997:10; Jejeebhoy 1995; Aryal 1989:89). Given the dearth of research

[1] This feature of Tamang marriage is found elsewhere in Nepal (Holmberg 1989:78; IDS 1986:28).

[2] My research shows that women marrying into the Jetthul study community originated from villages of neighbouring Village Development Committees within Sindhupalchowk District and from neighbouring districts such as Dolakha and Kabhre.

[3] The *Basic Education Needs Policies* later came under the *Poverty Alleviation Policy* of HMG.

monitoring the impact of road development on female schooling in near- and off-road areas, it is pertinent to consider whether there is evidence of diffusion of the urban trend of increasing female school attendance (CBS1995:381) to Jetthul.

From day-to-day observations of the school, it was apparent that overall, fewer girls attended classes than boys. To determine quantitatively participation in school by the women who formed the focus of this study, they were asked in the course of the survey "*Have you ever attended school, even if you never finished a grade?*" The age profile of women (in October 1991, at the time the survey was conducted) who had ever attended school is set out in table 6.1.

age	number of women
12	1
13	2
14	3
15	2
17	1
19	1
20	1
21	1

Table 6.1: Age profile of women who had ever attended school

All the women in the Jetthul study community who had ever attended school were born and raised in Samche and Turana. Although the school had been functioning for 29 years when the survey was conducted in 1991, table 6.1 shows that the oldest women in Jetthul to have taken up formal primary schooling were 20 and 21 years old.

age at school enrolment	enrolment year
4	1974
4	1976
8	1979
9	1987
10	1987
13	1987
12	1988
13	1989
13	1990
15	1991

Table 6.2: Age and year in which girls enrolled in school

More pertinent to my investigation of social change related to recent development trends and

road provision, is the year in which women first began to attend the local school. Women were therefore asked how old they were when they first went to school and this, together with their current age was used to calculate the year they enrolled in school. Only 10 of these 12 women who attended school were able to remember the age at which they enrolled, and these are set out in table 6.2.

Even though the school has been functional since 1962, among the 82 women surveyed, the earliest school attendance was in 1974. This is the same year in which the earthworks were commenced that laid the foundations of the Lamosangu-Jiri road. Figure 6.1 illustrates that it was not until the late 1980's that enrolment of more than half the women who had ever attended school had taken place.

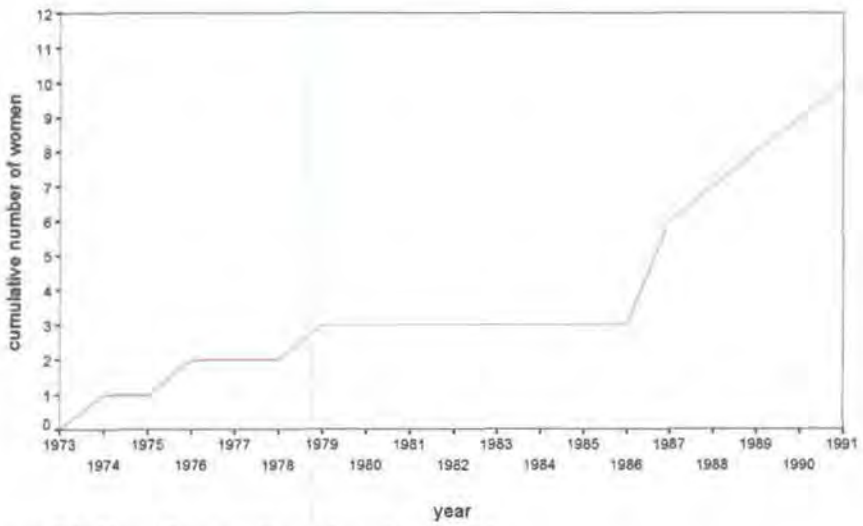

Figure 6.1: Year of women's enrolment in school

While the survey sample lacks the degree of representativeness to draw clear conclusions, the fact that female participation in the Jetthul school only commenced some 12 years after its opening and has only began to become established after the increase in human movement due to motorised transport, suggests that certain features of social change influencing rising female school attendance in urban areas may have diffused into the area due to road provision.

	Turana	Samche
school attenders	7	5

Table 6.3: Number of women from each village who attended school in Samche.

In order to determine whether walking distance to the school in Samche hampered the attendance of girls from Turana, I compared the number of women who had attended school by

their natal village. The results are illustrated in table 6.3. As two more women from Turana attended the school than those from Samche itself, village of residence does not appear to have affected girls' access and attendance.

6.5.1 Age at first school attendance

Although, ideally, children enter the first grade of primary school at the age of five, because household labour requirements are of prime concern to Tamang livelihoods in Jetthul, children's commencement of school is dictated by ongoing agro-pastoral and domestic labour demands. As I showed in chapter 4, the majority of Tamang households in Jetthul, like those elsewhere in rural Nepal following road provision (Nabarro, Cassels & Pant 1989:68) rely on income derived from male migrant wage labour. The consequential depletion in household adult labour, together with fluctuations due to illness, childbirth and death often necessitate the inclusion of children's labour to meet domestic and agro-pastoral demands. This causes children to be intermittently and sometimes completely withdrawn from school.

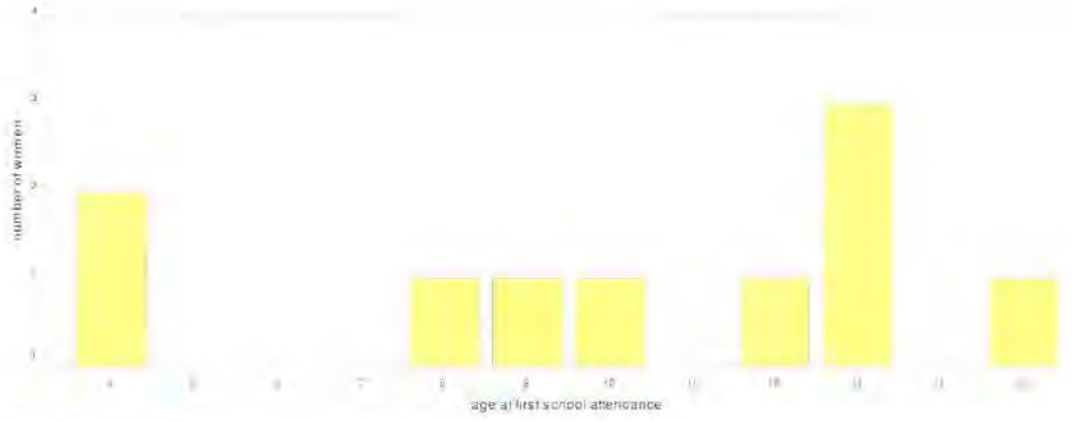

Figure 6.2: Women's age at first school attendance.

Figure 6.2 illustrates the reported age at first school attendance by the 10 women who were able to remember their age at the time. It shows that only two women began school at the age of four. The majority of women who ever attended school, eight of the 10, first began at the age of eight years or older. Three of these women did not begin school until they were teenagers. While the composition of individual households, land holdings and livestock, and agricultural calendar dictate ongoing needs for children's labour contribution, patterns in age at commencement of schooling also tend to reflect birth order. Women who were older than the official school enrolment age of five, tended to be born early in their families and their contribution to caring for younger siblings prevented them from attending school until their family was more established and there were several other siblings to act as carers and fewer

toddlers to be cared for. The two women who began school at the age of four were born into more established families. While one of these women was the very youngest child of her family, the other subsequently had to leave school when her mother gave birth to a son. Her household situation was such that older siblings were occupied with farm activities, and as a five-year-old, she was required to care for the new baby. Shifting dynamics within the household on occasions also release children's labour contribution and allow them to begin school as teenagers, as the following extract of taped dialogue with Tscherring Tamang illustrates:

KM: ... and how was it that you only began school when you were thirteen?
TT: Grandmother's eyes became white and weak and she was afraid to go to the fields. So she began to stay at home to look after the little ones and the house. She said "I have seen you looking at your brother's books. If you want to go over there [to the school] you go. I will stay here.

6.5.2 Primary school attendance and completion

As children, particularly girls, begin school older than the official age of enrolment and are withdrawn to contribute to fluctuating household labour demands, it is pertinent to determine the extent of women's schooling. In the quantitative survey they were asked: "*What is the highest school grade you completed?*" Of the 12 women in the sample who had ever attended school, only nine were able to remember which grades they had completed.

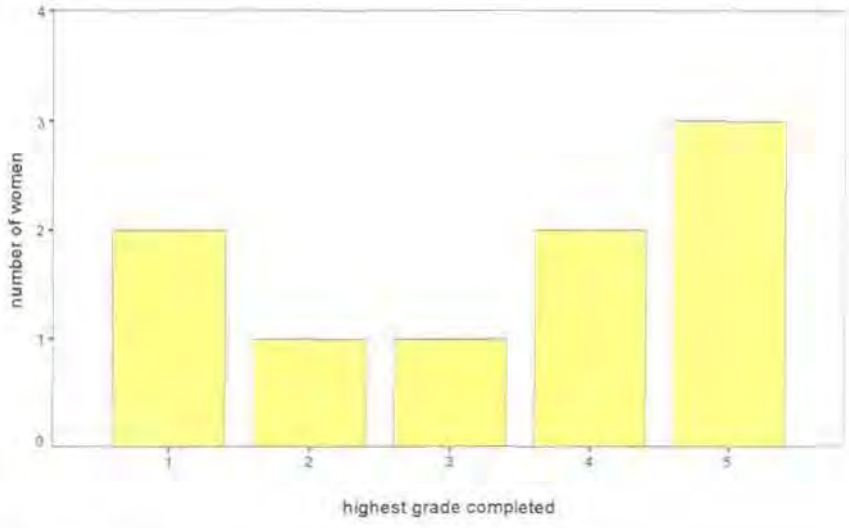

Figure 6.3: Highest grades completed by school attenders.[4]

Figure 6.3 illustrates that of these nine women, three completed no higher than grade 2, which

[4] Only nine of the 12 women who attended school reported the highest grade they had completed.

is equivalent to the second year of British primary school. A further three women completed no higher than 4th grade, equivalent to schooling completed by nine to ten year old children in the British system. Only three women had completed grade 5, the highest grade offered by the local school, and therefore theoretically completed primary education. Even though social change has occurred that has increasingly influenced families to send girls to the village school after 1974, their attendance is overall very poor and few complete more than the very early grades. This shows how, in spite of a growing will for girls to participate in the village school, the labour shortage resulting from increasing male migration encouraged by the road concurrently obstructs female completion of a primary education.

6.5.3 Secondary school

As the road effectively created a link with the secondary school in Thulopakhar, and some boys from nearby villages attended there, I asked the three women who had completed primary school: "*After grade 5, did you go on to another school?*" to determine whether any of them had taken up secondary education. This revealed that none of them had enrolled in secondary school at the town of Thulopakhar or elsewhere. As a consequence, none of the women had attained a School Leaving Certificate (SLC). Two of the three women who had completed primary school were unable to read and write and may not have been accepted in secondary school, had their parents wished them to enrol. Discussion with the only woman who had completed a primary education and was literate illustrates her reaction to my suggestion that she might have enrolled:

KM: After you finished fifth grade at the [primary] school here, did you go to the school in Thulopakhar or another school somewhere else?
SMT: (laughing) ... go to school in Thulopakhar! Why would I go there?
KM: Some people go on to secondary school and take the SLC. Would you like to have studied more and taken the examination.
SMT: How would I live in Thulopakhar? (laughs) ... no one goes to school in Thulopakhar from here. Some boys go from other villages ... (laughing) ... they are all boys there!

While a few boys from surrounding villages board out in Thulopakhar to attend secondary school there, none of the children of Samche and Turana did so during my fieldwork. Even though the road created a motorised link between the Jetthul roadhead and the secondary school in Thulopakhar and other educational institutions further afield, there is no history of anyone, male or female in Turana or Samche, receiving a secondary education elsewhere in Nepal or abroad. Parents tend to feel that such advanced education and gaining a School Leaving Certificate to be beyond both their means and needs. In Nepal, career opportunities are very much determined by one's *jat* and the Tamang, lacking local role models to the

contrary, perceive themselves to be farmers and labourers: the hope of accessing better paid professions by extending boys' education is a high risk investment. As I showed in chapter 4, even with the road enabling increasing numbers of Jetthul males to take up waged employment outside the village, employers' *jat* discrimination contributes to maintaining Tamang men in poorly remunerated and unskilled labour. In addition to the low probability of returns on investments in secondary education is the associated economic burden. Families say that secondary school fees, added to the cost of learning materials, travel and board and the loss of a child's labour, prohibits them contemplating putting their sons through secondary education. In spite of the prohibitive costs and lack of career incentives, some parents say that they would like to be able to educate their sons beyond primary school. The reasons they give for this, are connected with Tamang standing in wider Nepalese society and the patronising attitude of educated officials from higher *jats* : "... so they [boys in adult life] can speak with those people from Kathmandu."

While educating boys at secondary school is beyond the means of most, but within the aspirations of some of the Tamang families in Jetthul, the idea of educating girls to this level is regarded as folly. In so doing a family would effectively be investing lavishly in a daughter with no prospect of economic return before marriage, when her husband's household would benefit from any advantage secondary education might confer.

6.6 Literacy skills

The term 'literacy' although widely used in education and development literature, lacks definition (Wagner 1992). In the absence of a universal delineation for research purposes, some authors assume literacy if individuals can write their own name (for example, Blaikie 1975:47). As Tamang is not a written language, Nepali, the *lingua franca* of many of the country's ethnic groups (Hutt 1997:115) and the language used in schools, which the majority of women spoke fluently was specified during quantitative data collection concerning literacy. Thus, in the context of my own research and that of the TFRP discussed later in this chapter, 'literacy' is defined as the ability to read and write a letter in the national language. This provided respondents with a concrete concept of what was being asked in terms of their reading and writing abilities. Women were asked: "*Can you read a letter in Nepali?*" and "*Can you write a letter in Nepali?*"

Of the 82 women surveyed, six (7%) said they could "read a letter" in Nepali. Only five of these (6%) said that they could also "write a letter" and could therefore be regarded as fully

literate. Only four of these "literate" women had ever attended school. Of the two who had never been to school, one said that she had learned to read by observing her brother, who attended the village school. She followed text as he read aloud to her. Although she learned to read in this way, she had not learned writing skills. The other of the two women who had learned to read outside the school system, had been taught to read and write by her grandfather.

6.6.1 Age at entry into school, grade completion and literacy

In order to gain a quantitative impression of the efficacy of women's school experience and the importance of its timing and duration, I examined aspects of school attendance together with the attainment of literacy.

Eight of the 12 women who had ever attended school reported that they were unable to read and write a letter in Nepali. Although only four women who attended school were literate, chi-square testing indicated that school had a significant, positive effect upon literacy at the 5% confidence level. This shows that in spite of the poor resourcing, teaching skills and attendance of girls, participation in the village school has a significant effect upon literacy.

Ethnographic and survey data presented in section 6.4.1 revealed that Jetthul girls, because of household labour requirements, commenced primary school between the ages of four and 15 years of age. Because of well-recognised ages of critical learning, the relationship between age at first school attendance and self-evaluated literacy skills were examined using the chi square test to determine if there was evidence that learning had been impaired by late school entry.

Age on entering the village primary school was found to have no statistically significant effect on the achievement of literacy at the 5% confidence level, which suggests that late enrolment in school did not detectably impair girls' learning. This is borne out by case histories: the two women who began school at the youngest age of four years were both unable to read or write as adults. This is particularly surprising in the case of one of these women, who went on to complete all five grades of primary school and had the most complete education of all women surveyed. Of the four literate women who ever attended school, all had entered school relatively late. One began at the age of nine and the other three at the advanced age of 13. Figure 6.4 illustrates age of entry into school and ability to read and write a letter in Nepali.

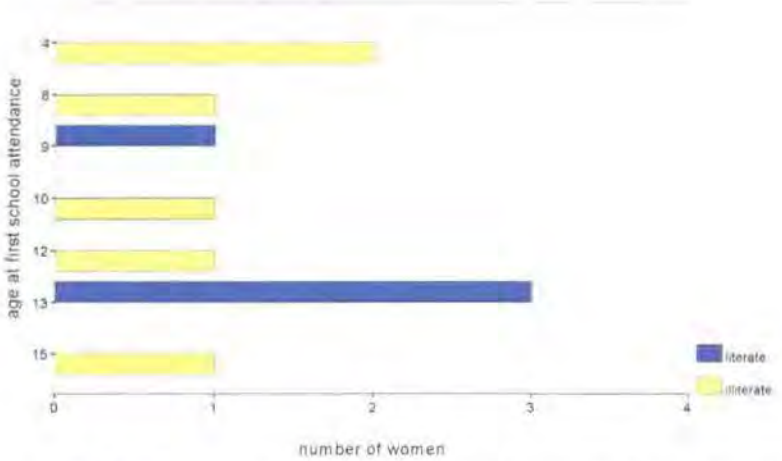

Figure 6.4: Self-evaluated literacy (ability to read and write "a letter" in Nepali) of women who attended school by age at first school attendance.

Although the sub-sample sizes are too small to conduct a credible test of statistical significance, figure 6.5, suggests an anticipated positive association between completion of higher grades and the attainment of literacy.

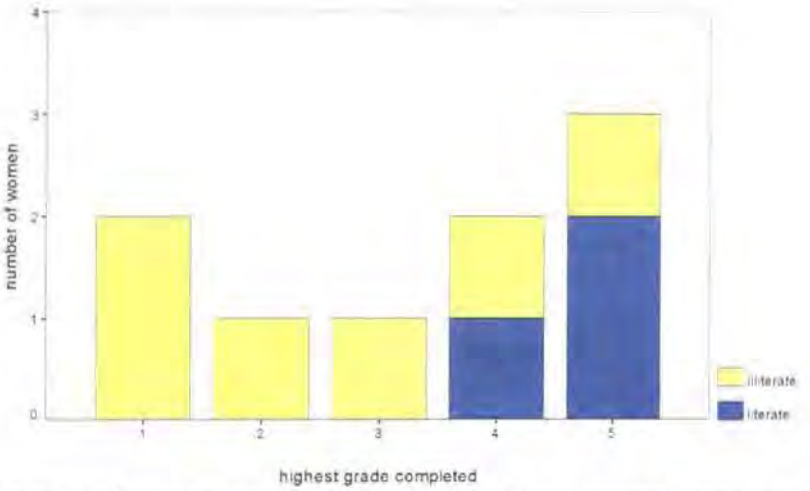

Figure 6.5: Relationship between literacy and highest completed school grade.

Figure 6.6 illustrates that apart from one woman who entered school at the age of four and completed all five primary grades, the older the girls were at the start of their schooling, the higher the grade they completed. This suggests they might have been placed in the grade they matched by age rather than ability.

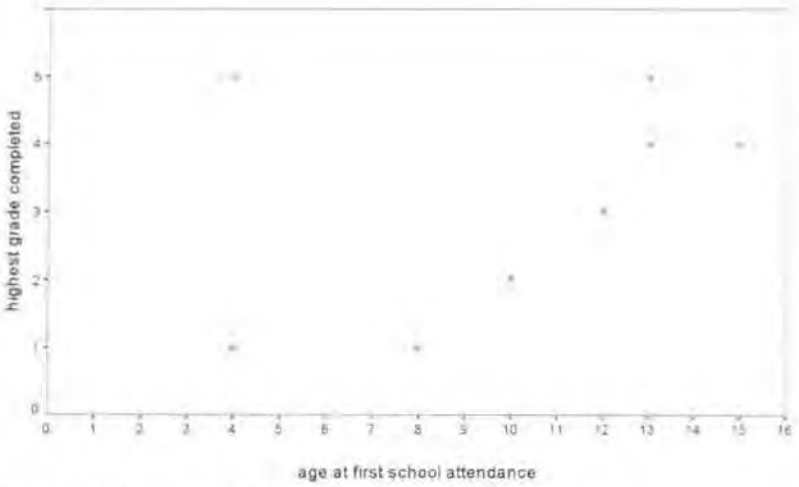

Figure 6.6: Scatterplot illustrating of age at first school attendance and highest grade completed.

6.7 Reasons for curtailed schooling

As the majority of women who ever attended school failed to complete all five grades of primary education and dropped out before the fifth and final grade, I explored the criteria that had influenced or dictated the end to their schooling. In order to ascertain factors determining school drop-out, the 12 women who ever attended school were asked: "*There are many reasons why people stop going to school. Why did you stop going to school? Was it because there were no more grades available at the school... or because it was too expensive? ... Or because you were needed to help you family with work? ... Or did you stop going to school for some other reason?*"

The two women who completed grade five and primary education said there were no further classes for them to attend in Samche. The remaining 10 women all reported discontinuing their schooling because they were needed to help with domestic and agricultural work. None of them reported any other reason for discontinuing their schooling.

The following extracts of taped informal interviews with women who dropped out of school before completing their primary education illustrate the circumstances leading to their exclusion from school and their feelings about their educational situation.

Phul Maya Tamang only completed the first grade. Her remarks reflect the important role young girls play in freeing their mothers for agricultural work, by caring for small infants:

KM: ... so you left school after just one year?
PMT: Yes. I left before the second grade.
KM: Why was that? Didn't you like it at school?

PMT: Yes ... I liked going to the school. Younger brother was born and my mother said "You must help me now. You have to look after your brother."
KM: How did you feel about not going to school any more?
PMT: What could I do? It was my duty.

Nima Tamang left school during her fourth grade. Although her comments suggest that she does not feel deprived by having to drop out of school, her situation reflects the preferential schooling of sons over daughters:

KM: Why did you leave at that time?
NT: My father went to the Terai to work in construction. Before he went he told my mother that I would help her in the fields.
KM: .... and what about your elder brother, did he leave school to help as well?
NT: No, my father said, "Your brother must stay at school to learn, so you must help your mother."
KM: Did it make you sad that you could no longer go to school?
NT: No... I didn't like it there.
KM: ...why was that?
NT: It was very cold ... there was no fire ... I didn't like it. I was happy to work with my mother.

Plate 6.3: A girl returning from collecting wood and fodder.

During informal discussion it became clear that the majority of parents were acutely aware that expending resources on girls is an investment with little return, as at marriage a daughter's resources, personal skills and labour capacity are transferred to and benefit "another" household. Others said they would like to be in a position of sufficient financial and manpower resources to spare their children's labour for them to attend school. Indeed, opportunities for girls to attend school or play are particularly compromised, as the demands of subsistence farming on their mothers leaves a gap in domestic labour and child care, which they are required to fill.

Most of the parents of girls who had recently dropped out of school expressed

regret at the necessity to curtail their daughters' education. Mothers tend to say that with their husbands working away from the village for long periods, they need their children to fill the gap left in the household labour force. The preference for removing daughters rather than sons is evident when withdrawing children from school. This is greatly influenced by parental awareness that their sons will migrate in search of waged labour for periods of their adult lives and their belief that the literacy, numeracy and "knowledge" they gain from school will aid them in dealing more effectively with life outside the village. Some say that boys need to be educated in order that they will not be cheated when they seek waged work outside Jetthul. At the very basis of parental concern for their sons' efficacy in functioning outside the village in later life, is that their welfare in old age is dependent upon their sons' economic abilities.

Some adult women expressed regret at their own educational deprivation. Laxmi Tamang aged 21, who grew up in Samche, spoke of her desire still to learn:

KM: Did you go to school as a child?
LT: Yes.
KM: How old were you when you first went to school and how old were you when you left?
LT: Four years when I went to school. I finished after one year.
KM: Why did you finish after just one year?
LT: I had to work hard in the home...what could I do?.... I want to study more...what to do?

Migmaya Tamang aged 54, was born, raised and married in Samche and was 25 years old when the school was established in the village:

KM: When you were a girl, did you ever go to school?
MT: There was no school in those days.... how could I go when there was no school to go to?
KM: If you were young now, would you want to go?
MT: Yes ... I want to learn...

6.8 Comparison with the Tamang Family Research Project

6.8.1 School attendance

Data set out in table 6.4 indicate that female school attendance in both the TFRP settlements is markedly lower than that of the Jetthul sample. Lower participation in education by the off-road Timling women may be due to the comparatively later establishment of the local school, which opened almost 20 years later than the Jetthul school, in the late 1970s (Fricke *et al.* 1991:30). The road two days walk from Timling that created a motorised link with Kathmandu and the wider nation was also constructed later than that near Jetthul.[5] Any potential diffusion

[5] In the mid-1980s (Fricke 1993:34).

of social change driving the rise in female education in urban areas would therefore be expected to lag behind Jetthul and Sangila which had earlier and closer road provision, contributing to the lower female school attendance in Timling.

Even though local public schools opened in the early 1960s and 70s[6] in the on-road peri-urban community of Sangila, it is evident from table 6.4 that female school attendance is lower than that in Jetthul. This is counter-intuitive, given the historical and geographical context of better educational and road provisioning, which lead to the expectation of a more established rise in female schooling (Niraula & Lawati 1998:163; Aryal 1996:89; LeVine *et al.* 1994), as has been the trend in urban areas of Nepal in recent decades (CBS 1995:381). As I set out in section 3.2.1, the TFRP samples were markedly larger than that of Jetthul,[7,8] and this apparent paradox may be a consequence of variation in sample size.

near-road	off-road		on-road	
Jetthul	Timling[9]		Sangila[10]	
female	female	male	female	male
14.6	1.7	18.5	8	47

Table 6.4: School attendance as a percentage of each community sample.

TFRP data also underscore the marked gender differential in school attendance observed in Jetthul. Survey data show that in off-road rural Timling, male school attendance is almost 11 times greater than that of the females, whereas in the on-road peri-urban setting of Sangila gender disparity in education is somewhat lower and male school attendance is just less than six times that of females. This reflects the national trend of improving gender parity in schooling in urban areas of Nepal (CBS 1995:381).

near-road	off-road		on-road	
Jetthul	Timling[11]		Sangila[12]	
female	female	male	female	male
3.3	0	2.4	2.2	4.4

Table 6.5: Average school grade completed for each Tamang community, by gender.

[6] Fricke *et al.* (1991:71) report that an existing private temple school in Sangila became open to public entry in the late 1950s. A further three public schools opened in 1961, 1972 and 1978, which initially taught up to primary grade 3 and later expanded to teach 10th grade.
[7] In Sangila 532 women were included in the formal survey compared with just 82 in Jetthul.
[8] In Timling 235 women were included in the formal survey.
[9] Source: Fricke *et al.* (1991:45).
[10] Source: Fricke *et al.* (1991:71).
[11] Source: Fricke *et al.* (1991:45).
[12] Source: Fricke *et al.* (1991:71).

Data displayed in table 6.5 illustrate that the average grade completed by women who attended school in Jetthul, was 3.3. This is higher than those of women in both the near- and off-road TFRP samples. In off-road Timling, none of the women had completed any school grade by the time quantitative data were collected in 1987, which given the late provision of the local school is not contrary to expectations. In on-road Sangila, however, the female mean of completed grades was, on average, one grade lower than the Jetthul mean. Again, due to the great differential in sample sizes, interpretation of this comparison should be made with caution as the low representation of women completing grades in the Jetthul sample (n=9) produces an unreliable mean.

6.8.2 Educational attainment

Table 6.6 illustrates that none of the Timling females over the age of 12 could read or write. In Sangila and Jetthul, where school attendance has effected literacy, the educational output is poor and female literacy levels falls far short of the national figure of 25%. That female literacy is higher in Jetthul than among on-road peri-urban women of Sangila is again most probably an effect of the variation survey sample sizes.

	near-road	off-road		on-road			
	Jetthul	Timling[13]		Sangila[14]		National[15]	
	female	female	male	female	male	female	male
read Nepali	7.3	0	25.3	4.1	49.0	25[16]	54.4
write Nepali	6.0	0	19.3	3.6	43.8	n/a	n/a

Table 6.6: Literacy levels, expressed as percentage of sample totals.

Female literacy is illustrated as a percentage of school attendance in table 6.7.[17] Data available for the Sangila sample do not exclude literate women who never attended formal school and should be regarded as an over-estimation of the percentage of school attenders who gained literacy. Even given the crude estimation of school output in the TFRP samples, it is apparent that in Sangila the success rate of achieving female literacy is higher than in both rural settings. This may be due to a reduction in the need for child labour, as a consequence of decreased reliance upon subsistence agriculture (shown in chapter 4), and better school provisioning due to Sangila's on-road, peri-urban location. Overall, however, it is evident that in all three

[13] Source: Fricke *et al.* (1991:47).
[14] Source: Fricke *et al.* (1991:73).
[15] Source: CBS (1995:376).
[16] The census does not make a distinction between the abilities to read and write. This figure, therefore, represents the percentage of women who are termed 'literate'.
[17] For the purpose of expressing literacy as a percentage of school attendance, the two literate women of Jetthul who never attended formal education were not included in this calculation.

communities, the efficacy of schooling is poor in producing literacy among girls.

	near-road	off-road	on-road
	Jetthul	Timling	Sangila
	female	female	female
number attended school	12	4[18]	44[19]
number literate	4	0[20]	22[21]
percentage literacy of school attenders	**33%**	**0%**	**50%**

Table 6.7: The relationship between female literacy and school attendance.

Survey data presented in table 6.8 illustrate that none of the women in either of the near- or off-road rural communities have ever passed the School Leaving Certificate examination. Even in the on-road peri-urban setting of Sangila, only one female has ever attained the basic national secondary school qualification. The total absence of SLC passes in the Timling community suggests that like Jetthul, there was no inclusion of Tamang children in secondary school education. In Sangila, while there is evidence of increased participation of children in secondary education, there is wide disparity between girls and boys in the attainment of SLC passes.

near-road	off-road		on-road	
Jetthul	Timling[22]		Sangila[23]	
female	female	male	female	male
0	0	0	1	10

Table 6.8: SLC passes by settlement location and gender.

6.8.3 Curtailment of schooling

In common with women in Jetthul, Fricke *et al.* (1991:46,73) found that the primary reason given by both women and men of the TFRP for curtailed schooling, in both settings, was that as children, they were required to work. This suggests that even with road provision and closer actual and effective proximity to urban centres, Tamang children remain obstructed from accessing schools because of the need for their labour. This is a consequence of their low caste status, poor employment and wage earning prospects and overall poverty of Tamang people in Nepal.

[18] Source: Fricke *et al.* (1991:45).
[19] Source: Fricke *et al.* (1991:71).
[20] Source: Fricke *et al.* (1991:47).
[21] Source: Fricke *et al.* (1991:73).
[22] Source: Fricke *et al.* (1991:45).
[23] Source: Fricke *et al.* (1991:71).

6.9 Discussion

The overall profile of female education in Jetthul is characterised by low school attendance by girls compared to boys, low completion of grades and primary education and poor achievement of literacy. Furthermore, in the absence of adequate development interventions, road provision alone has clearly been ineffective in enabling Jetthul girls' access to secondary schooling and even though the road links the study community with the secondary school in Thulopakhar, none of the Jetthul children have been educated there. The absence of village-based educational facilities prior to the school opening in 1962 and subsequent lack of initiation of adult literacy programmes in the villages, accounts in part for illiteracy among older Jetthul women. Local topography and poverty have not been conducive to women mobilising intermediate forms of transport to attend area-level adult literacy centres in ways that have been innovated by women in south India (Sainath 1995; Rao 1994). Although it was beyond the scope of this study to account for the educational history of women who married out of Jetthul, there is no evidence from those remaining of girls participating in the local school prior to 1974 when the earthworks of the road commenced. Since this time, the road has not effected any further educational innovations such as the successful national *Cheli Beti* and *Shiksha Sadan* out-of-hours teaching programmes discussed in section 2.5.3.1. In the light of research indicating that road construction has a positive impact on girls' school attendance in LICs (Khandker *et al.* 1994 18), the female educational situation in Jetthul is contrary to expectations. As Richards (1984:16) has commented, "lower mobility costs should increase enrolment". Given the existence of a primary school in Samche for almost 30 years prior to the study and the road link with the secondary school, there are clearly factors other than physical access that act to hamper the education of Jetthul girls and women. Combined ethnographic and survey research revealed several features contributing to the situation of low female schooling and literacy in Jetthul.

The continued uncomfortable and unstimulating nature of the school itself appears be a factor discouraging attendance and for female pupils, in particular, there is the added problem of attending to toilet, and in the case of older girls, menstrual needs. Although the school has a pit latrine, it is very poorly maintained, unpleasant and avoided by pupils and staff. Whereas girls working in the fields can slip away unnoticed, this is not always possible in the classroom setting. As the road has failed to encourage the recruitment of female teachers, the presence of which is associated with increased female school attendance (Handa 1999:26), and all staff are male, there may not be the necessary sensitivity towards girls' needs in the classroom. The nature of the school experience in Jetthul is not unique or dissimilar to that reported in other

rural areas of Nepal (UNICEF 1992:50:144; Grover 1991:34; Miller 1990:88). Even though the road enables the continued provisioning of the school, the lack of funding nationally prevents the road contributing to improvements in the educational infrastructure in Jetthul.

Patterns of girls' schooling in Jetthul show their attendance to be erratic. Girls commence school at a wide range of ages and of those who enrolled, very few complete all five grades of primary school, indicating a high drop-out rate. Furthermore, only a proportion of girls who attend school are able to read and write. The wide differential between school enrolment and literacy skills reflects a combination of factors inhibiting learning. These include the poor teaching facilities (Glewwe & Jacoby 1993) and frequent ill health and malnutrition (Glewwe *et al.* 1999:28), which tend to be exaggerated in girls (Brock and Cammish 1991; Miller 1990:88). In Nepal, as in other rural communities of LICs, overall attendance at school is often dictated by the agricultural calendar and is, therefore, sporadic (Ennew 1982). With increasing male economic migration identified in chapter 4, this early impact of the road acts to exacerbate households' need for children's labour, which hampers their ability to access basic education and prevents them becoming literate. This has particular implications for girls in Jetthul, who like those elsewhere in Nepal (Shrestha 1998:18), tend to be withdrawn from school before their brothers in times of increased domestic and agro-pastoral labour requirements.

Research in Nepal (Shrestha 1998:15; Nabarro & McConnell 1990:72) and in other LICs (Grieco *et al.* 1996:162; Richards 1984:16) has indicated that households' economic well-being is a prime determinant of the degree to which children benefit from improved physical access to schools that road provision affords. The persistence of poverty that chapter 4 showed to have been unalleviated by effective income-generating innovations or interventions following road provision, has particularly important consequences for girls in the Jetthul area. The 1991 census illustrates the national level of poverty and consequential reliance upon child labour which constrains their education. Just over 23% of Nepalese children aged between 10 and 14 are *officially recorded* to spend at least six months of the year engaged in *remunerative* labour. The national disparity between the proportion of girls (28.54%) and boys (18.44%) comprising this juvenile labour force (CBS 1995:208), is exaggerated in the hill district of Sindhupalchowk in which Jetthul is situated. Sindhupalchowk District ranks 20th[24] (HMG/N 1993) in the percentage of girls in waged labour, with just over 41% of girls, compared with 24% of boys in this age group, documented as labouring for half the year or more for wages. This reflects the harsh economic situation of many hill groups in the District, such as the

[24] Out of 75 districts country-wide.

Tamang of Jetthul, which road provision alone has not adequately alleviated. Census data, however, do not reveal the much higher proportion of children, and girls in particular, engaged in unrecorded non-remunerative labour such as domestic chores, household agriculture and reciprocal *parma*[25] activities.

Child labour and its gender-disparate nature are generally regarded as being under-reported by the national census and other quantitative data sources (UNICEF 1992:52). In chapter 4, I reported that in Jetthul, in common with Tamang elsewhere (Campbell 1993:158; IDS 1986) and other Nepalese communities (Thapa, Chhetry & Aryal 1996; Nag *et al.* 1978; UNICEF 1992), girls in particular, from as young as five, are often sole carers of younger siblings from their mother's departure for the fields in the early morning, until dusk. With the high maternal mortality rate in Nepal, (UNICEF 1995:78) exaggerated in rural communities, young girls often have to completely fill the labour void left by the death of their mothers. Indeed, the 1988 Nepal Rastra Bank survey noted that girls spend more time in 'hidden' domestic labour than boys, and that girls' workloads are greatest in hill communities. Certainly, in Jetthul, most children are engaged in some form of labour several years before the age of 14 and the 1991 census fails to reveal the substantial proportion of rural children engaged in occasional and daily labour, which impedes their access to education. Children's crucial role in the domestic economy, as a barrier to schooling, is highlighted in the study by the (Nepal) Centre for Education Research Innovation and Development, which reports that the majority of pupils who prematurely leave school are children of subsistence farmers (CERID 1987). While the *Factory and Factory Workers Act 2016* (1960) and *Citizenship Rights Act 2012* (1956) provide that children should be at least 14 years old to labour in industry or mining, there is no enforced prohibition of child labour at the agricultural or domestic level. Similarly, although Nepalese law states that children have a right to education, the *Education Act* makes no legal requirement for school enrolment or attendance. Overall there is little legal muscle to break the non-schooling-illiteracy cycle in Nepal (Thapaliya 1989). Parallels are apparent in Levine's (1987:192) appraisal of influences upon child labour in the industrialisation of England, where: "... child employment disappeared as a result of technological supersession of handicraft production, not legislation." Indeed, Caldwell *et al.* (1988:167) regard the development of technological innovations to be major determinants of increasing children's education in contemporary south India. They argue that motorisation of transport and agricultural processes such as milling, together with improved crop yields and diversification, reduce employment in the agricultural sector. With the consequential labour surplus, it is argued that landowners

[25] *Parma*, a form of non-remunerative reciprocal labour by which Tamang households pool labour and work in gangs on each other's land, is disussed in chapter 4.

switch from employing family work groups to individual adults. In Jetthul, however, this pattern of agricultural development has not evolved following road provision. As chapter 4 revealed, rather than stimulating a labour surplus, the Lamosangu-Jiri road has encouraged migration. The resulting labour shortage has increased reliance upon child labour, of girls in particular, which has negative consequences upon their educational development.

It is well documented that in Nepal and other LICs where class- or caste-prejudice of employers means that educational attainment has no wider economic or social returns, schooling is perceived as having little inherent value (Dove 1983; Acharaya & Bennett 1981; Berreman 1972). Examination of male survey data provided by the TFRP reveals, however, that while there is little evidence of increased female schooling among the Tamang with road provision and close urban proximity, there is a marked improvement in male uptake of educational opportunities and achievements. Gender differentials are expressed in the higher percentage of males attending school, completing school grades and passing SLC examination. This reflects the wider application of education in the on-road and peri-urban setting, where educational investment becomes a potential asset in employment, trade and social arenas. While the Lamosangu-Jiri road has impacted upon the Jetthul community by encouraging the economic migration of men, thereby shifting parental views towards an increasing value in educating boys, attitudes towards educating girls' are less progressive. Whereas female literacy across all three Tamang settings is markedly lower than the 1991 national female rate, among the on-road peri-urban males, the literacy rate approaches that of the national average (CBS 1995:376). Although national census data indicate a decreasing differential between male and female educational indices in urban areas in recent decades (CBS 1995:381), at the micro-level, there appears to be continued gender disparity in education among the Tamang. My findings in Jetthul, considered together with secondary TFRP data, reveal that even following road provision, girls continue to experience low participation in local schools. Several aspects of Tamang life observed in Jetthul contribute to this situation.

Although there is no evidence that female education is considered an impediment to marriage in Jetthul, my ethnographic findings highlight a prevailing view that parents are only able to benefit from investment in daughters prior to their marriage (CERID 1984). In poor rural communities such as Jetthul, this has a strong negative effect on girls gaining access to even basic formal education (Brock & Cammish 1991). The potential economic advantage of educating boys in settings with wider economic opportunities that is reflected in higher male schooling in the on-road peri-urban community of the TFRP has not resulted in a similar

increase in female schooling, as daughters have no direct economic input to ageing parents' welfare. Acharaya and Bennett's (1981) study of the status of women in eight Nepalese ethnic communities underscores this key barrier to female schooling among the Tamang. Whereas higher economic status was associated with increased schooling of girls in most ethnic communities, in spite of close proximity to the capital, the Tamang exhibited the lowest literacy rates and value put on female education. The low educational participation and attainment of girls in both Jetthul and the TFRP communities also reflects the widespread preferential investment in sons (Gurung 1996; Acharaya 1995; Morgan & Niraula 1995; UNICEF 1992:59; RIDA 1991), and boys' education in Nepal (Cameron *et al.* 1998:20; Zivetz 1992:35). Indeed, calculations using World Fertility Survey data have determined Nepal to be a country with very strong son preference (Cain 1993:56). This is due to two key factors prevalent in Nepalese and Tamang society. In the absence of a pensions and welfare structure in Nepal, sons are crucial to the survival and comfort of parents in old age and incapacity. Male descendants are also an essential element in the Nepalese spiritual cosmos, and a son lighting a parent's funeral pyre is fundamental to a favourable rebirth (Dahal 1989:78).

In Jetthul, like other poor communities in LICs, girls' school attendance is regarded as adding to the burden of adult work loads (Lwechungura Kamuzora 1984) and the household economy (Schildkrout 1980). There are therefore, few incentives for parents, many of whom have not received schooling themselves, to relinquish children's crucial work contributions and pay for their school materials, let alone pay for costs of travel and tuition inherent in their attending secondary school in Thulopakhar. This, together with the poor educational output of girls attending the Jetthul school, discourages parents from sparing their children's labour. Under marginal economic circumstances, poor rural families' strategic inclusion of children, especially girls in the domestic labour force, ensures a return on parental investment.

While national data suggest the Tamang to be one of Nepal's most underprivileged communities in terms of education uptake and achievement (Chhetry 1996:102),[26] micro-level research set out in this chapter shows women and girls in Jetthul to be particularly disadvantaged. The literacy rate among women of Samche and Turana, at six percent, is very low compared with the national female rate of 25% (CBS 1995:376). Placing the educational situation of Jetthul within a wider Tamang context, however, provides a different perspective. Compared with literacy rates of women of the TFRP (0% in rural off-road Timling and 3.6%

[26] Chhetry (1996:102) quotes the 1991 Population census recording a literacy rate of 27.79% for the Tamang people nationally, compared with an overall national literacy rate of 39.6% (CBS 1995:376).

in on-road peri-urban Sangila), and elsewhere in Sindhupalchowk (IDS 1986:11),[27] that of Jetthul appears more progressive. Although female enrolment and educational output of the Jetthul school are low, attendance has a significant and positive effect on female literacy. Due to the *post hoc* nature of this study that is compounded by many Tamang women moving villages at marriage, however, it is not possible to make precise conclusions concerning patterns of female education and literacy in relation to possible change stimulated by the innovative potential of the Lamosangu-Jiri road. While the literature concerning changes in female education, a pivotal aspect of female development linked with demographic change, is scant, Shrestha (1998:6) observed an increase in school attendance among on-road communities in rural Dhading, which reached near gender parity. This rise in educational participation was, however, attributed to the impact of the road in stimulating school construction, as much as changing attitudes to the education of children. Quantitative data from Jetthul indicate that female participation in education did not commence until road construction commenced, some years after the local school was established, and that there has been a gradual subsequent increase in female schooling in recent years. While this may suggest that the road and increasing female urban exposure (set out in chapter 5) have contributed to the diffusion of aspects of background social change that have influenced the trend of rising female schooling and literacy in urban areas, as the school (unlike in Shrestha's study), was built prior to road construction, the link between female schooling and road provision in Jetthul is too tenuous to infer any direct relationship.

The demographic consequences of the overall poor degree of female educational development in Jetthul provides limited potential for desirable change associated with improving health indices and a decline in the population growth rate (Aryal 1998:89; Niraula & Lawati 1998:169; Karki 1998:185; NFHS 1996:23). In the absence of local project support towards a substantial increase in female school attendance, the innovative potential of the Lamosangu-Jiri road on the lives of Jetthul women is greatly diminished. Indeed, the situation in Jetthul and its implications for female development is underscored by a key statement of the 1994 Cairo World Conference on Population:

> The large remaining shortfalls in basic education and adult literacy, particularly among girls and women, continue to be major obstacles in many countries to progress in every sphere of their development, including changes in patterns of human reproduction (UN 1994:9).

Clearly more in-depth research is required to determine appropriate and sustainable means by which girls of poor rural communities, such as those in Jetthul, can more fully participate in education.

[27] This micro-level study reported just 1.6% literacy among Tamang adults in Siauli VDC.

Chapter 7

Female autonomy in the process of marriage

What is important for demographic change is that women be in control of their own lives and have a voice in matters affecting themselves and their families...
S. Jejeebhoy 1995:7

Nepali women are daughters, wives and mothers, but are not recognised as individuals with their own identity, despite the fact that they are as human as men.
P. Subedi 1993:1

7.1 Introduction

Research conducted among rural south Indian women suggests increasing mobility and consequential broadening of experience to be closely linked to growth in confidence and rising self-esteem (Sainath 1995; Rao 1994). In Nepal, studies indicate that as the experience of young people moves beyond the boundaries of family-centred life and the natal village, the process of spouse selection also changes, which has demographic implications (Dahal & Fricke 1996:391;Watkins 1996:153; Fricke & Thornton 1991). While the impact of road provision on female autonomy in the process of marriage remains poorly explored, recent research in Nepal indicates that traditional practices are being replaced by decision-making in which young people, and women in particular, are more proactive (Adhikary *et al.* 1990:25; Sacherer 1990:21). In chapter 5, a pattern emerged of increasing urban contact among girls and women in Jetthul since the advent of the road. Considering that this trend is associated with erosion of the traditional extended family structure in rural Nepal (Shrestha 1998:17), it might be hypothesised that since road provision, there have been rising opportunities outside the family sphere of influence, for women and girls to form their own romantic attachments. Among pre-marital girls, this might be expected to increase the occurrence of "love marriages", thereby

diminishing the frequency of kin-arranged unions, including the custom of cross-cousin marriage. Given the more liberal sexual attitudes of the Tamang considered in section 2.4.4, it might also be hypothesised that increasing male migration since road provision (revealed in chapter 4), together with rising urban contact among married women, provide wider opportunities for extra-marital affairs. This might be expected to lead to a rise in women abandoning arranged marriages in favour of new, self-determined romantic relationships.

This chapter examines female participation in the nuptial process and pre-marital acquaintance of partners to detect early changes in courtship and marriage since construction of the Lamosangu-Jiri road. In particular, analyses are made to determine whether there has been change in traditional control of marriage by senior kin and changes in the occurrence of women abandoning their husbands. This is important in detecting fundamental change in female autonomy and the influence of senior household members on women's life processes.

7.1.1 Definition of terms

The literature concerning female autonomy reveals great variation in the definition of terminology. The expression 'female status' is used by some authors (Acharaya 1995; Cain 1993:43; Ahmad 1991:30; Pradhan 1989:103; Acharaya & Bennett 1981) and avoided by others who regard the term as too specifically implying 'esteem', which it is argued, does not directly relate to autonomy (Niraula & Lawati 1998:157; Jejeebhoy 1995:6). As Mason (1993:23) points out, not only is variation in terminology apparent in the literature concerning female autonomy, but particular terms are attributed different meanings by various authors.

In their landmark review of Indian data linking female self-determination with demographic behaviour, Dyson and Moore define female autonomy as:

> ... the capacity to manipulate one's personal environment. Autonomy indicates the ability - technical, social, and psychological - to obtain information and to use it as the basis for making decisions about one's private concerns and those of one's intimates. Thus equality of autonomy between the sexes in the present sense implies equal decision-making ability with regard to personal affairs (1983:45).

In this chapter, I use the term 'empowerment' to refer to the personal authority, independence and power of women in their own lives, and 'autonomy' in reference to women's self-determination and self-government. While some authors avoid the term 'status', I use it to describe women's standing in a given social environment, such as the household and community.

7.1.2 Assessment of female autonomy

Female autonomy and empowerment within a society is multi-faceted and as such, has no single defining measure. This, together with the variation in terminology of female empowerment, renders comparison of research findings problematic (Mason 1993:23). Some studies focus on economic indicators such as participation in wage labour and income generation (Cleland *et al.* 1994:56), and the scale of female dependence on males (Cain 1993:43), while others use age at marriage, educational attainment (Acharaya 1995:159), freedom of movement and household decision-making to quantify female autonomy (Niraula & Lawati 1998:161). Of particular interest to my own study of female empowerment and its linkages to road provision is participation in the marital decision-making process. In the Nepalese setting, this provides a valuable marker for gauging change in female autonomy and is also one of the most important decision-making processes affecting women's lives. Investigation of female autonomy in the marriage process also provides insight into family structure and organisation relating to reproduction, and engenders specific events that are distinct and quantifiable. Furthermore, women's role in spouse selection is regarded as a key feature of female autonomy among Asian communities (Cleland *et al.* 1994:55; Dyson & Moore 1983:45) which is reflected in its increasing use in the assessment of female empowerment in Nepal (Shrestha 1998:138; Dahal & Fricke 1996:391).

7.2 Objectives

In order to provide an analysis of female autonomy in the initiation, process and termination of marriage in Jetthul, and to determine whether change has occurred since construction of the Lamosangu-Jiri road, I set out to:

- determine the level of pre-marital acquaintance of women with their first husband;
- chart over time the circumstances and arenas in which women first came to know their future spouse;
- determine women's role in the initiation of the marriage process;
- explore the process of spouse selection and quantify the proportion of marriages arranged by couples themselves and those arranged by wider kin over time;
- explore female participation in the acceptance and refusal of marriage proposals;
- quantify the frequency of cross-cousin marriages before and after construction of the Lamosangu-Jiri road;
- investigate the phenomenon of capture marriage and how its occurrence has changed over time;

- examine the incidence of female initiation of marriage dissolution.

7.3 The initiation and process of marriage

In Jetthul, women's lives to early maturity pass without ceremonial milestones. The first, and perhaps most important marker in a woman's life is the series of events leading to her marriage. Young people are regarded as being of suitable maturity for matrimony when they have completed their first *lhokhor*.[1] For girls, commencement of menstruation endorses entry into womanhood and while this developmental marker is unaccompanied by ritual, it is apparent by the observance of menstrual restrictions, such as sleeping apart from other family members and avoiding contact with men's drinking water during bleeding.

While young women are regarded as sexually mature and potentially marriageable from puberty, the economics of the household exert a considerable force on keeping girls in their natal homes. As I set out in chapter 4, the nature of subsistence agro-pastoralism intensified by male economic migration places a heavy burden on households' labour resources. Consequently marriage of young women is carefully timed and negotiated, as potential benefits of alliances formed through marriage have to be balanced against the loss of a daughter's adult labour capacity. It is therefore in the interest of senior household members to ensure a high level of control in the nuptial decision-making process.

Because marriage removes a woman's labour from the household that endured the pain of her birth, nursed, fed and clothed her throughout childhood, the process inherently generates imbalance in the exchange between households. The essential nature of family-based labour to household economies and the necessity to create balance is expressed in the nature of exchanges of work, goods and obligations that are instituted at marriage. Central to Tamang society (Dahal & Fricke 1996:380; Campbell 1993:130-132) is the fundamental notion that men as wife-takers become indebted to brides' families as wife-givers and are therefore somewhat subordinated. This debt is not solely to the bride's parents, but also to her brothers for the loss of their sister. Men repay their debt to their wives' parents and brothers by performing free labour and services in both the agricultural and ritual arenas of Tamang life, such as in the *chewar* ritual first cutting of a son's hair and at funerary rites such as *ghewar*. Families call upon their sons- and brothers-in-law to assist when additional labour is required, which effectively increases the network of labour upon which they can draw without incurring

[1] A 12-year cycle.

financial costs. Married men find they are summoned by their in-laws at times of peak agricultural activity and to assist in occasional duties such as re-roofing and house construction. This has the potential to create stress for men who have responsibilities and tasks to complete on their own farms and is an important consideration determining the distance between natal and marital villages of women marring into and out of Jetthul. Over generations marriages have tended to be contracted with nearby villages. Close proximity maintains an acceptable journey time for men travelling to wives' natal villages to pay bride service, which from brides' parents' perspective, provides some assurance that prospective sons-in-law will carry out their duties. Minimising the distance between natal and marital households is also supported by women during the contact of marriage, who tend to refuse to marry into households situated more than a day's journey from their natal village. In Jetthul, road provision has made no detectable impact upon the radius of villages in which brides are exchanged. Because the Tamang are very cash poor, the unaffordability of motorised transport for the purpose of paying brideservice, determines that the distance between many brides' natal and marital homes remains within a day's walk of Jetthul.

Many families seek to form marriage alliances that form a network of reciprocity and exchange of goods and services, and therefore create balance between households. A marriage based on mutual attraction alone could have the consequence of reduced exchange and poor returns on the investment in a daughter. In rural agro-pastoral societies experiencing labour shortages, such as Jetthul, reciprocal exchange of offspring through marriage is a valuable economic strategy, common both among Tamang (Campbell 1997:228) and other Tibeto-Burman hill communities such as the Gurung (Macfarlane 1997:192; Gurung 1997:507) and the Nyeshangte (Watkins 1996:115). In common with other hill groups of Tibetan ancestral descent (Macfarlane 1997:192; Watkins 1996:115; Bista 1987), among the Tamang of Jetthul and elsewhere (Campbell 1997:207; Dahal & Fricke 1996:380; Holmberg 1989:60) the marriage ideal is between cross-cousins,[2] and parents of the prospective couple are pivotal in arranging such unions. Married women are particularly proactive in arranging unions between young couples. As they travel more frequently between villages than their husbands, and maintain broader networks of communication between clans and villages, they are closely in touch with information concerning potential marriage partners. During visits to natal kin, women are able to ascertain the suitability of certain matches and the potential benefits of particular alliances. As married women tend to visit brothers, rather than men visiting sisters

[2] Whereas the Tamang and Nyeshangte practice bilateral cross-cousin marriage (Campbell 1997:215; Watkins 1996:115), the Gurung preference is for matrilateral marriage (Macfarlane 1997:192; Gurung 1997:507).

in their marital homes, women posses the knowledge as to the nature of marital homes their daughter's could expect in other villages and the suitability of girls who may be available to marry their sons. In this way, women are the main assessors of individuals within a range of suitable choices, as their information is often more detailed than that of their husbands. By moving between marital and natal villages, women act as agents in the early and informal stages of marriage negotiations to secure the most advantageous union for their children. As geographical patterns of marriage remain unchanged since road provision, for reasons already discussed, married women's mode of travel to natal villages remains similarly consistent since road provision. Due to household's lack of cash and because the majority of women's natal villages can be reached along tracks, easier than by road, women continue to walk to their natal villages.

Girls, and indeed boys, are often resigned to their parent's' choice of spouse, but during the embryonic stages of marriage negotiations, they may act to steer their parents towards their own preference within the range of potential cross-cousins and other partners under parental consideration. Parentally selected spouses most frequently redress existing imbalance of exchange between households, and when girls prove difficult in co-operating in such alliances, they tend to come under additional pressure from their brothers. As wife takers, a girl's brothers are subordinated and indebted asymmetrically to their wives' kin. By marriage of a sister to a man's wife's brother, balance is restored as the exchange of services and obligations becomes reciprocal. A brother's intervention often smoothes any difficulties in gaining a girl's co-operation, for in addition to the affection between siblings, girls need to maintain close bonds with brothers for the security they represent. As brothers eventually head their own households, they have the power to offer sisters refuge in times of crisis.

The formal contract of marriage is usually initiated by the groom's male kin, who formally, yet covertly, visit the bride's parents with a gift of alcohol, usually *chang* (millet beer) or *rakshi* (rice spirit), to ask the father for his daughter in marriage. The prospective bride usually makes any protest known at this point, either by directly voicing her disapproval, or by silently failing to co-operate. It is in the bride's parents' interest for their daughter to consent to the chosen match, as in Tamang society, it is not uncommon for an unwilling bride to fail to participate in the wedding meal and be unco-operative with her husband. Gossip in Jetthul suggests that it is not uncommon for unwilling brides to refuse to "lie next to" and have sexual contact with their husbands, even under duress from parents-in-law. Such unions often fail to produce children and prove fruitless for all concerned parties, which can lead to rifts between

households, compensation claims and unrewarded expense on the part of the prospective groom's family.

When a woman's parents approve of a proposed match, the prospective bride's father signifies his agreement to the marriage proposal by drinking the offered *chang* or *rakshi*. If the alcohol brought by the groom's party is not taken up and drunk by him, it is a clear message of decline and the proposing party departs.

At the time of their marriage, women are traditionally given their *daijo*, which represents a share of their parents' property that remains inalienably theirs throughout life. As I discussed in chapter 2, this customarily comprises livestock, grain, jewellery and cash. The extreme level of poverty in Jetthul has led to a marked decline over the generations in the composition of women's *daijo* and many do not receive any such property. Among women who are fortunate to be presented with *daijo*, the extent of their goods is dependent upon their families' resources and the number of daughters among whom it is to be shared. Cash transfers to women at marriage tend to amount to less than NR 1,000 and are usually between two and seven hundred roupees. Jewellery gifts are also quite small, often consisting of a single pair of gold earrings or a few bangles. It is very unusual for women to receive cattle; those whose *daijo* comprises livestock, tend to be given a goat or a few chickens.

Young women in Jetthul are generally reluctant to enter into marriage, especially when a union has been arranged on their behalf and they come under pressure from parents and family. Marriage engenders a significant emotional upheaval for young women who are required to leave the security of their natal homes, where they have grown into their status, with lifelong sibling-allied companions and tried and tested family love and loyalty, to reside with their husband in his parents' home. For young women with limited experience of residence outside their natal household, the change in situation is a source of anxiety and young women worry about the workload their in-laws will expect of them. They also undergo a decline in status when they enter their husband's household as young wives, and often experience conflict with in-laws. Removal from the security of family love is among the many disadvantages associated with marriage that discourage girls from matrimony in Jetthul and which has been described by Jones and Jones as a similar concern among Limbu women (1976:121). Even though a woman may marry into the house of her paternal aunt or maternal uncle, her blood ties are not as strong as those in her natal home. She relinquishes the security and immediate proximity of her parents and siblings and transfers clan to live with others, who may be virtual strangers.

Many young brides complain of the amount of domestic and agricultural work they are required to carry out by their in-laws. The following transcript of an excerpt from a tape recorded interview with a young wife in Samche is typical of many conversations I had with young married women. At the time of our interview, Fursang Tamang was 20 years old, and had been married for two years to her paternal aunt's son. She and her husband lived in her aunt and uncle's house with her unmarried sister-in-law:

KM: ...and what was that like, living with your husband after marriage?
FT: ...I didn't like it there in that place.
KM: Why was that?
FT: There is too much work. I have to do everything...no-one helps me!
KM: What about you sister-in-law, is she kind to you?
FT: ... a little...
KM: ...does she help you with the work?
FT: A little.

When women join their marital households their lives become entwined with that of their husbands, which introduces an additional aspect of uncertainty. The vulnerability entailed in attachment to a man through marriage compounds women's reluctance to marry. Like the Nyeshangte, young women in Jetthul are hesitant to marry and risk becoming enmeshed in grief associated with bad male behaviour (Watkins 1996:135). In Jetthul, for example, some men are known to drink heavily and beat their wives and unlike many of Nepal's Hindu communities, Tamang sexual and marital relationships tend to be more fluid, which compromises female security in marriage. Indeed, it is not uncommon for a husband to bring another woman into the house as a preferred co-wife (Fricke 1993:135; IDS 1986:35), as Maili Tamang's narrative below illustrates. Maili, aged 52, had been married since the age of 16 and lived in Turana:

KM: Where did you live together?
MT: We lived with my husband's family.
KM: How was that... were you happy?
MT: ... it was hard.
KM: How was it hard?
MT: ... it was difficult... my husband brought another wife...
KM: Another wife?... Did you stay, or did you leave your husband's house?
MT: I stayed. It was my duty... it was hard... I was forced to do all the work...

As many women grow up knowing with whom and where they are expected to live in later married life, pre-marital discussions often centre on perceived negative aspects of the future marital village. Female anxiety concerning their expected workloads and domestic hardship are expressed in common themes revisited in discussions about how much further it is to fetch water and fodder, how much steeper the slopes to the fields and scarcer the fuelwood in

prospective marital villages. Even the food of the future nuptial household tends to be derided. Of particular concern to young women during nuptial negotiations is the proximity of their proposed marital home to their natal village and access to friends and family. Women particularly try to avoid marrying into villages where they have no "clan sisters" from their natal village. Because there are a number of clans into which women can marry within the villages of Jetthul, women prefer to accept proposals from households in close proximity to their parents' home. In this way they are able to remain within their own support network of friends and family and are more familiar with their prospective marital home. As I mentioned earlier, young women are extremely reluctant to marry into villages more than a day's walk away from their natal home, although some do. Because of the lack of financial reserves to allow women to use motorised transport to travel between their natal and marital homes, and because many villages are not served by roads and can only be reached via tracks, road provision has not changed women's mode of transport for these journeys.

The degree of ritual and celebration involved in Tamang marriage is highly variable and influenced by family wealth, social status and the degree of kin involvement in arranging the union. The Tamang *Pradhan Panch* (leader of the *panchayat*, as administrative regions were still termed in 1989) of a neighbouring VDC, regaled me with accounts of his triumphal procession on horseback to his prospective bride's home. This was a particularly unusual and extravagant display, in a region where horses are no longer commonly kept due to the shortage of fodder. In Jetthul, greater ceremony tends to be attached to marriages that have been arranged by the couple's kin. Throughout the entire process the offering and acceptance of alcohol and food symbolises and affirms the exchange of family members, labour and obligation. Indeed, the Tamang refer to marriage literally as "exchanging" with other families.

Once a groom's kin have initiated a marriage approach and the bride's family have agreed to the match, the next stage of the process involves the groom's kin processing to the bride's natal home with gifts of cloth and alcohol, to take the bride to her marital home. The groom gives cloth to both the bride and her mother, and before the couple depart for the nuptial home, the bride's father places red *tika*[3] powder on the forehead of the couple and a token amount of cash is given to the bride. The close bond between sisters and brothers is expressed in the marriage ritual, when it is usual for the bride's brothers to pick her up and literally give her to the groom. The bride then travels to her marital home where a celebratory meal is provided and where a

[3] Tika powder, usually red, is an important ritual material in Nepal. Either used dry, or mixed with yoghurt, rice or ghee, it is placed on the foreheads of deities and people on ceremonial occasions as a sign of blessing.

lama[T][4] may officiate.

In addition to formal parental arrangement, there are several other potential routes towards marriage in Jetthul involving less ceremony, fewer kin and less ritual obligation. Couples sometimes initiate their own relationships and bypass senior kin and formal arrangements by eloping. Such arrangements are often presented to kin and neighbours as "capture" marriage, which masks the bride's collusion and diffuses family conflict. Marriage by capture in Jetthul also occurs without the 'bride's' consent when women are abducted by their suitor and his male accomplices, although tradition dictates that a captured woman who refuses to marry her abductor for three days should be returned to her family. In practice, when an elopement or abduction has taken place, processes are set in motion that gradually introduce the rituals of exchange at the heart of Tamang marriage. It is not uncommon for such informal marriages to have prior tacit agreement of senior kin, and usually, by the *chewar* of the couple's first son, the marriage has been sanctioned by both families. Even elopement and abduction unions adhere to the boundaries of clan exogamy, as unions transgressing these rigid boundaries would be regarded as incestuous and would not be tolerated by the community. There is evidence that with exposure to more 'sophisticated', and Hindu, urban society, there has been a decline in the customary acceptance of capture marriage in some rural Nepalese communities (Pfaff-Czarnecka 1997:438). It might, therefore, be hypothesised that since road provision, broadening experience through urban and media exposure might lead to a reduction in the acceptability of abduction as a means of marriage initiation.

Division of the sample into two marriage cohorts

As this chapter focuses on changes in the marriage process over time, the 54 ever-married women in Jetthul were divided into two cohorts according to when their first[5] marriage took place in relation to the timing of construction of the road. To facilitate the most historically meaningful and statistically viable analyses, the 'pre-road construction' marriage cohort comprises women who were married before 1978, and the 'post-road construction' cohort comprises women who were married from 1978 onwards. Table 7.1 illustrates that 50% of married women fell into each division, forming the most viable cohorts for comparison and analysis.

[4] A Tamang priest.

[5] Where women have been married more than once, data presented here refer to their first marriage. Unless stated otherwise, all analyses and references in this chapter are to first or only marriage.

In terms of events in the development of the road project near Jetthul, the 'pre-road' marriage cohort represents women who were married before the local section of the road was open to traffic. Of this 'pre-road' cohort, 86% of women were married before any construction commenced on the section of road near Jetthul in 1974. Furthermore, the whole of this cohort were married before the earthworks were completed and limited 4-wheel-drive vehicle movement began at the end of 1978 (Maag: personal communication 25.7.99). Only 14% (n= 4) of women in this cohort were married in the transition period when foreigners and outsiders were working on the road near Jetthul, but before any commercial transportation had been introduced.

year of marriage	no. of women married	cumulative frequency
'pre-road' marriage cohort (n=27)		
1955	1	1.9
1963	1	3.7
1964	2	7.4
1966	2	11.1
1967	3	16.7
1968	4	24.1
1969	3	29.6
1970	2	33.3
1971	2	37.0
1972	1	38.9
1973	2	42.6
1976	2	46.3
1977	2	50.0
'post-road' marriage cohort (n=27)		
1978	2	53.7
1980	1	55.6
1981	3	61.1
1982	2	64.8
1983	3	70.4
1984	2	74.1
1985	2	77.8
1987	4	85.2
1988	3	90.7
1989	2	94.4
1990	2	98.1
1991	1	100.0

Table 7.1: Composition of the two marriage cohorts.

Of the later 'post-road' marriage cohort, all but two of the women (93%) were married after the road was opened to public transport in 1980. These two were, however, married after the earth-works had been completed and the road was motorable to 4-wheel-drive vehicles. As many passing vehicles take passengers for a small fee, it is assumed that between 1978 and 1980 people of Jetthul potentially had occasional access to transport, and travel became more accessible around this time.

7.3.1 Acquaintance with first husband prior to marriage

Men and women, boys and girls in Tamang society enjoy a generally relaxed relationship and socialise together often without close supervision of senior kin. Unlike Hindu communities in Nepal (Niraula 1994:90), safeguarding of female virginity is not an issue and young people associate freely. Many young people in Jetthul form romantic attachments and engage in sexual activity prior to marriage. Although some couples elope, the majority of marriages are arranged and young people find themselves contracted to marry partners with whom they are unfamiliar. Even when a planned marriage is between cousins, residency patterns may mean that the couple are unacquainted. This adds to the stress of marriage for young people and indicates a low level of autonomy in the nuptial process. In order to determine whether changes had occurred leading to a detectable shift in the premarital acquaintance of spouses, women were first asked: "*Did you know your first husband before marriage?*"

	sample (n=52)		x-cousin marriages		non-x-cousin marriages	
	number	percent	number	percent	number	percent
knew husband before marriage	24	46	13	87	11	30
did not know husband before marriage	28	54	2	13	26	70

Table 7.2: Pre-marital familiarity with first husband, according to relatedness of partners.

Of the 54 ever-married women, 52 responded to this question, 54% of whom reported that they did not know their husband prior to marriage, and 46% of whom said that they had known their husband prior to marriage. Table 7.2 illustrates that pre-marital familiarity between couples was more common where marriage partners were also cousins. As expected, testing with the chi-square procedure revealed a statistically significant ($p<0.005$) relationship between the relatedness of the spouse and pre-marital familiarity.

Data set out in figure 7.1 show that just 4% more women in the 'post-road' marriage cohort had prior acquaintance of their first husbands than in the 'pre-road' marriage cohort. In the comparatively small data set provided by the married women of Jetthul, this indicates no marked change in pre-marital familiarity between future spouses following road provision.

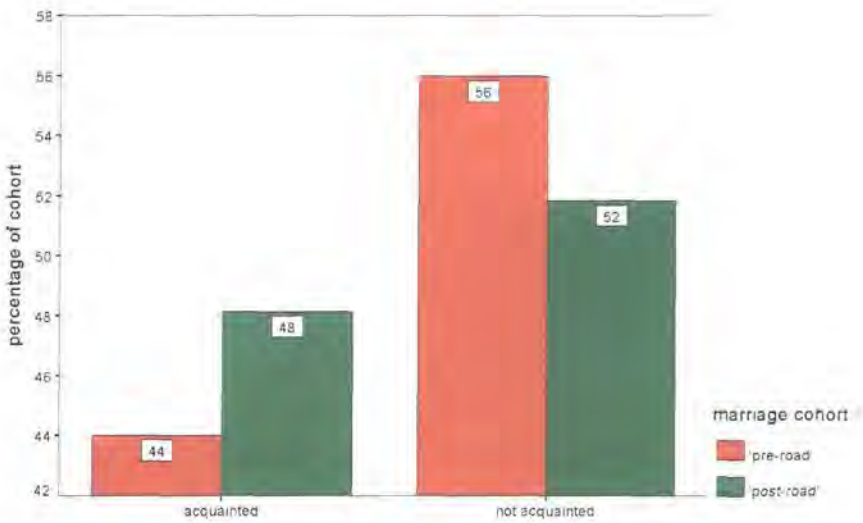

Figure 7.1: Pre-marital familiarity with first husband by marriage cohort.

7.3.2 Manner and arena in which women met their husbands

There are many different routes through which young Tamang couples can potentially meet and form attachments leading to marriage. At the local level, young people might potentially get to know each other at school, although as I illustrated in chapter 6, very few girls actually attend school. Young people also come together while working in *parma* labour gangs, although as young men are increasingly migrating for waged work, since road provision, these tend to comprise mostly women. Occasionally, girls accompany their mothers and other female relatives on visits to other villages where there are opportunities to form attachments with cousins and other young men. In their teens, girls go to *mela* (dances) and festivals with groups of friends. They become very excited about these excursions, especially at the possibilities for "finding love". Groups of young people exchange information about each other's clan affiliations through competitive song and during these night-long events, girls dance, sing, flirt and exchange token gifts young men. Not uncommonly, these highly charged erotic exchanges culminate in sexual contact between couples and occasionally marriage.

As I mentioned in the chapter introduction, chapter 5 revealed that since road provision, there has been a rising trend of urban contact among pre-marital girls. This is associated with decay

of the conventional family structure in rural Nepal (Shrestha 1998:17). During visits to Kathmandu girls are exposed to modern images of romance, marriage and female empowerment through entertainment media accessible there. Their visits to the capital also provide another arena in which to meet with young men from the village who are based in the city during extended periods of wage labour and their friends in an exciting and novel environment. To explore quantitatively ways in which women met their husbands, in order to determine whether there was evidence to suggest a shift in pre-marital acquaintance since the advent of the road, I asked: *"How did you first become acquainted with your (first) husband? Did he live in the same village as you, or did you get to know him at a fair or dance... at work... at school... while travelling... through friends, ...through your parents... through other relatives... or in some other way?"*

Table 7.3 illustrates the responses of the 54 ever-married women. The majority, 74%, reported meeting their first husband through their parents. The next most frequent mode of acquaintance, through which six women (11% of ever-married women) came to 'meet' their future husband, was by forceful capture.[6] Only four women, 7% of all ever-married women, had met their first husband through friends.

route through which first spouse was met	number of women	percentage
parents	40	74
forceful capture	6	11
friends	4	7
fair/dance	2	4
neighbour	1	2
other kin	1	2
school	0	0
while travelling	0	0
at work	0	0

Table 7.3: Manner and arena in which women became acquainted with their first husband

Data set out in table 7.3 illustrate that only four women (7%) met their first husband at a fair, through non-parental kin or because their husband was a neighbour in their village. None of the women of Jetthul reported meeting their future first spouse at school, or work, or while travelling.

[6] A greater number of women than those discussed here initially reported their marriages to have been initiated by 'capture'. Further enquiry revealed that a proportion of these cases were consensual unions masked as capture. Marriages categorised as 'forceful capture' had no former acquaintance between the bride, or her family with her future spouse, prior to abduction. Capture marriage is considered further in section 7.5 of this chapter.

Quantitative examination of women's pre-marital acquaintance with their first husband by marriage cohort reveals that similarly high proportions of women in both cohorts met their spouse through parental arrangement. Of the 'pre-road' marriage cohort, 70% (n=19) became acquainted with their future spouse through their parents, compared with 78% of the 'post-road' marriage cohort (n=21). Forceful capture as a route to marriage, declined in the 'post-road' marriage cohort. While almost 19% (n=5) of marriages of the 'pre-road' cohort were initiated by abduction, this declined to less than 4% (n=1) in the 'post-road' marriage cohort. I go on to consider capture marriage and the decline in unions initiated by forceful abduction in greater detail in section 7.5 of this chapter.

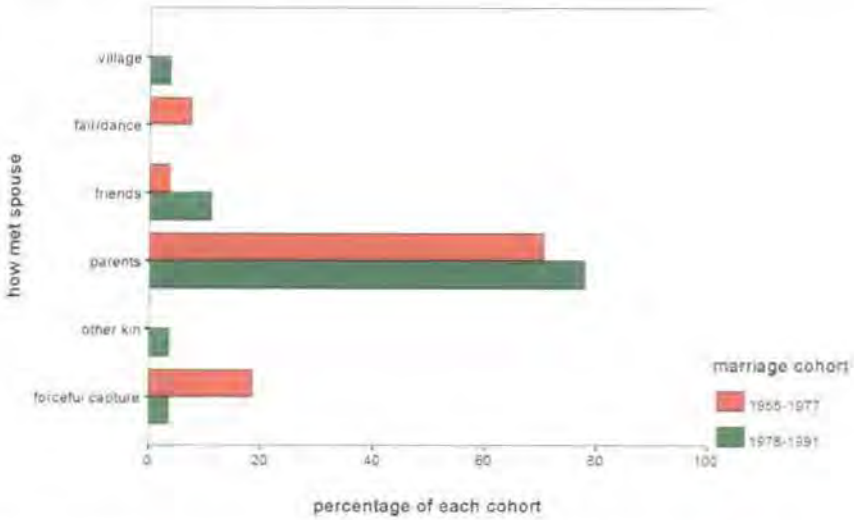

Figure 7.2: Manner and arena in which women met their first husband, by marriage cohort.

The 'post-road' marriage cohort was composed of marriages resulting from a slightly wider variety of modes of acquaintance than the 'pre-road' cohort. Figure 7.2 shows that a small proportion of 'post-road' marriage partners had met as neighbours in the same village and through wider kin, whereas none of the earlier, 'post-road' spouses had met in this way. Only two women, of the 'pre-road' cohort met their future spouse at fairs and dances (4%), whereas none of the women married after road construction reported meeting their first husband in this way. It is clear, however, from the continued narrow and local sphere in which spouses become acquainted that the road itself has not heralded new opportunities for couples to form romantic attachments leading to marriage. In the next section I consider whether there is evidence to suggest that increasing exposure to modern lifestyles since road provision has influenced relaxation in traditional control of spouse selection by senior kin.

7.3.3 Women's role in the initiation of marriage

While a groom's kin formally propose a marriage to a prospective bride's parents, married women are highly proactive in the negotiation and informal initiation of the nuptial process. In a similar way, parents sometimes accept that their children want a "love match", yet initiate a proposal in the customary manner. Occasionally couples elope in the face of parental opposition, or may receive a tacit indication from senior kin that they may do so. Elopement is sometimes masked as a capture, in order to absolve a bride and her kin of any responsibility for her not being available to suitors who may have some claim on her.[7] To determine whether there is evidence of change in the autonomy of women in the initiation of the nuptial process in first marriages contracted since the advent of the road, quantitative responses were obtained from the question: "*Was your (first) marriage initiated by you, your parents, your husband or your husband's parents, or someone else?*"

marriage initiator/s	number of women	percentage
respondent	1	2
respondent's parents	5	9
husband	5	9
husband's parents	36	67
other	7	13

Table 7.4: Individuals who initiated respondents' first marriage

Data set out in table 7.4 illustrate that the majority of women's first marriages were initiated in the traditional manner, by their groom's parents. Only five marriages (9%) were initiated by grooms alone and five (9%) by girls' parents. Thirteen percent of marriages were attributed to "capture", which I discuss later in this chapter. Only one woman said that she initiated her own first marriage. The background to this singular case is detailed in my field notes:

> "In those days before I lived in another [her father-in-law's] house, I used to go to festivals with my sisters... We used to dance... [laughs] ... how we young girls liked to dance! ... and sing!" Sancha met her future husband Tilak at a *mela*. "He and his brothers sang to we girls 'What is your clan? Where are you from' and we sang back to them, we are from Chakpa [in Dolakha]. Our clan is Gyaba ... What is the name of your village? What is your clan?' " After singing and dancing into the night and exchanging gifts, she and Tilak returned to his village together, where his parents accepted her as their daughter-in-law. After a few days Sancha and Tilak visited her parents house, with gifts of *rakshi*. Although her parents were angry that she had eloped, they took to Tilak who over the years, proved to be a dutiful son-in-law. As Sancha says, "My parents are pleased with him".

[7] I discuss various forms of capture and their meaning among the Tamang of Jetthul in section 7.5 of this chapter.

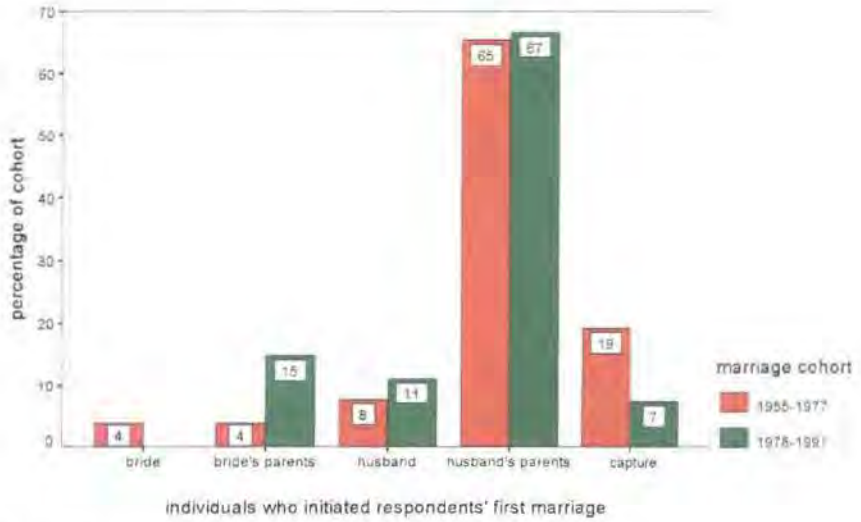

Figure 7.3: Initiation of first marriage, by cohort

Figure 7.3 illustrates that over time there appears to have been a slight increase in the initiation of marriages by women's parents and by their prospective husbands. The traditional initiation on the part of the groom's family has remained at much the same level in the two cohorts, with a very slight increase in the 'post-road' cohort. Alternative routes of marriage initiation have in fact declined over time. There is therefore, no evidence to suggest that increasing contact between Jetthul youth (increasingly including girls) and urban life since road provision, detailed in chapter 6, has acted to erode traditional processes of marriage.

7.3.4 Female participation in spouse choice

As well as acting as central figures in preliminary nuptial negotiations, married women play an important role in the decision-making process surrounding formal proposal and the final selection of their daughters' spouses. While the "father" of the household formally responds to the request from a prospective groom's kin by declining or accepting their proffered *chang*, the "mother" of the household has special agency as the hostess in the proceedings and her husband's actions are determined by their joint decision. Hospitality and commensal exchange is of prime importance in Tamang culture. A woman's skill in brewing and as a hostess ensures that the formalities of the marriage process satisfy social expectations. The correct exchange conducted through a "mother's" hospitality has the power both to cement the formal acceptance of a proposal and to soothe relationships that might otherwise be bruised by the rejection of a proposal.

While some couples form their own relationships by various means that later progress to

marriage, in the majority of marriages in Jetthul, the process of accepting or declining a proposal is formally decided by a girl's parents and overall, young people display a low level of autonomy in the nuptial process. It is frequently said both in Tamang and anthropological circles, that a woman can refuse an offer of marriage. Indeed female resistance of parental choice of marriage partner has been reported among Tamang of west Nepal (Campbell 1997:212; Holmberg 1989:76-81). In Jetthul, however, when a marriage approach is made on behalf of a man that a girl's family regard as a highly advantageous match, especially if he is an 'appropriate' cousin, girls feel they can only effectively use delaying tactics. Under such circumstances women tend to stave off imminent marriage by arguing that they are too young, or do not want to marry *yet.* As networks of clans and alliances involving the Jetthul community tend to be quite local, some women form romantic attachments with the partners their parents wish them to marry. In the majority of cases, girls who remain reluctant to do so, eventually cease resisting and agree to their parent's choice, especially when pressed to do so by their brothers.

To gain a quantitative impression of girls' autonomy and participation in the process of choosing or accepting their own marriage partner, women were asked about the main decision-makers in the choice of their first husband. During the formal survey, they were asked: *"There are many different ways to get married; sometimes our parents choose for us and sometimes we choose for ourselves who to marry. Who chose your (first) husband? ... Was it completely your decision, or did you and your husband decide together, ...or did you and your parents decide together or was it completely your parents' decision?"*

For women who responded that they and their parents decided together, the following question was posed to determine how far women had participated in the decision-making process of their own first marriage: *"Even though you and your parents decided together, one of you probably had more say. Who would you say had the most influence in the choice of your (first) husband, you or your parents?"*

decision-maker/s	number	percentage
parents alone	38	70
bride+parents together	10	19
forceful capture	6	11
bride +groom alone	0	0
bride alone	0	0

Table 7.5: Participation of women in spouse choice

Survey data set out in table 7.5 illustrate that the majority of women, 70%, reported that their parents had chosen their first husband. Only 19% of women reported being consulted by their parents and participating in the choice of their first marriage partner. None of the ever-married women reported being the main decision-maker, either alone or with their future husband.

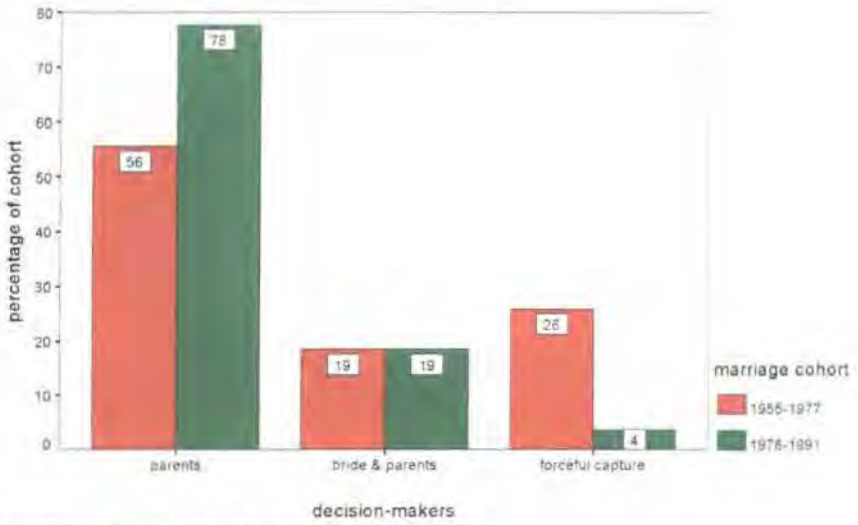

Figure 7.4: Marriage decision-makers by cohort

Figure 7.4 illustrates that the tradition of parents being the main decision-makers in their daughters' first marriages has been maintained in Jetthul. Prior to construction of the road, 15 of the 27 marriages (56%) resulted from parental decision-making. Of the 27 women comprising the 'post-road' cohort, in 21 cases (78%) parents had been the main decision-makers. The disparity between cohorts, however, is largely accounted for in the decline in forceful capture marriages, the majority of which occurred in the 'pre-road' marriage cohort, which is considered later in this chapter.

7.4 Frequency of cross-cousin unions

Essentially, a woman's male cousins from her paternal aunt or maternal uncle are considered to have a right to her as a wife as cross-cousin marriage is the ideal, natural order in the Tamang worldview (Dahal & Fricke 1996:380; Holmberg 1989:60). The fundamental relationship between brothers and sisters is central in cross-cousin marriage. In giving a daughter in marriage to her brother's son, a woman satisfies her obligation to him and reinforces the close bond between them. As I set out in section 7.3, on an economic and social level, such marriages ensure symmetry of obligation between households and clans.[9] To also become wife-givers to her natal household creates balance and of economic significance, certainty of

[9] Because men as wife-receivers are beholden to their wives' natal kin.

return of ritual free labour and services. Of particular importance, given the labour shortage in Jetthul, is that marriage to non-kin is associated with a significant reduction in fulfilment of traditional duties to wives' natal kin and payment of brideservice in rural Tamang society (Dahal & Fricke 1996:391). Alliances formed through cross-cousin marriage, however, are regarded as more economically viable, as donation and receipt of free ritual labour crosses families and balanced reciprocation is achieved (Levine 1989:5). As men traditionally pay brideservice to their wives' kin, strengthening of alliances through cross-cousin marriage further ensures that free labour is received as well as given.

Cross-cousin unions are also perceived to be beneficial as they are regarded to enhance social compatibility within the marital household (Bittles 1990:4), in addition to maintaining resources within the wider kin network. Women tend to feel that their daughters will be "looked after" if their father-in-law is also their maternal uncle. While this holds true in some cases, individual personalities and household dynamics tend to be the main determinants of family harmony or otherwise.

If a woman has many male cousins through her father's sisters and mother's brothers – not of her clan - her pool of potential, 'ideal' marriage partners is high. If not, there may be just a single cousin who from an early age is considered to be her future spouse and parents may assume their children will marry from a very young age, even though no formal ceremony will have taken place. Conversely, some women may not have an appropriate male cousin to marry.

To quantitatively assess the frequency of cross-cousin marriage to assess whether there had been significant change in the occurrence of this traditional form of marriage since the advent of the road, in the formal survey, women were asked about the pre-marital relatedness of their spouse: "*Before your marriage to your (first) husband, was your father related to your husband's mother?*" and "*Were your father and your (first) husband's mother, related as brother and sister from the same father?*"

Although in English, this form of questioning may be perceived as confusing, the Tamang and Nepalese languages contain terms that specify routes of relatedness. Furthermore, Tamang people commonly address relatives by their relationship status, which renders this method of inquiry reliable and simple in this ethnographic setting.

marriage cohort	no. of cross-cousin marriages	percentage of cohort
'pre-road' prior to 1977	7	26
'post-road' after 1977	8	30
all marriages	15	28

Table 7.6: Number and percentage of cross-cousin marriages, by cohort.

Of the 54 ever-married women, 15 (28%) had married their cousins. Of these, 10 women had married their paternal aunt's son, and five had married their maternal uncle's son. Comparing the two marriage cohorts, data set out in table 7.6 show that seven (26%) of the marriages prior to construction of the road, and eight (30%) marriages after, were between cousins, indicating similar numbers and proportions of cross-cousin marriages over time. The maintenance and slight increase over time in the Tamang marriage ideal, between cross-cousins, underscores the continued importance of strategic marriage in securing household and wider kin interests in Jetthul.

7.5 Capture Marriage

Traditionally, 'marriage by capture' is understood to occur when a woman is abducted against her will by a male and his accomplices in the hope that she will agree to marriage. In Jetthul and elsewhere, the term is applied quite loosely and also encompasses marriages by love and elopement. Holmberg (1989:62) refers to the latter as "mock capture" and under such circumstances, couples may have received prior unspoken acceptance of a senior relative. After all, such an arrangement can be highly convenient as a means of circumventing any social impediments and the expense of more formal arrangements.

All unions initiated by capture in Jetthul are within the bounds of Tamang society norms regarding clan and incest.[9] One case in Jetthul, however, was unusual in that it involved a Tamang man abducting a woman from a different ethnic group. While this was an uncommon occurrence, as a Chetri, the woman's caste status was within acceptable boundaries in that she was not of a *pani nachalne jat* and her complete unrelatedness ensured that codes of clan and incest were not transgressed.

[9] The Tamang, like many of Nepal's hill groups, rigorously observe incest taboos. Even in highly charged erotic encounters at fairs and dances, couples rapidly assess each other's clan affiliations. As couples, surrounded by excited friends, flirt through song, they probe the clan affiliations and family tree of their 'opponent'. In this way, incest is avoided, so that even an elopement with a stranger would not transgress social boundaries.

The deception and distress caused to young women by forceful capture is evident in the personal experiences related to me by abducted women. Gita,[10] a 31-year-old woman living in Turana described her capture to me in a tape-recorded, loosely structured interview. The following extract from the transcript conveys the anguish of capture for marriage:

> I had gone to cut fodder for our animals. My husband, who I did not know at that time, came with some of his clansmen. They took me away... I was afraid and shouted "Do not take me!"... but they laughed and took me away.
>
> He told me he was a Chetri[11] like me ... so I agreed to be his wife.
> When I was brought here to his village Turana as his wife, I knew his people were Tamang.
> (Interview recorded August 1991).

The abduction had catastrophic implications for Gita. Being unchaperoned, in the company of *matwali* men, was socially ruinous for a young Chetri woman. Gita's virginity, essential to marriage in her own community, could not have been guaranteed following her abduction. Acharaya highlights the situation for the majority of women in Nepal: "Women have few social options for survival other than marriage" (1995:159). Socially, Gita's bridges were burnt by her abduction, and her future prospects were grim. Her only chance of marriage and economic survival was to remain with her abductor. Whichever decision she made, would render her an outcast from her family and friends, and literally an 'out-caste' from Chetri society. The Chetris, in common with many other communities in Nepal, are intolerant of marriages to lower *jat* partners (Miller 1990: 46) and the distress of Gita's abduction and subsequent partition from her family and community cannot be overstated.

Marriage initiated by capture is greatly discussed by the women in Jetthul. The potentially disastrous consequences of an undesirable union, together with the erotic connotations of abduction, lend a *frisson* to discussions of marriage. From discussions concerning love and marriage I gained the impression that some women wished to apply a mildly illicit and highly romantic flavour to the beginning of their own marriage histories. This is apparent in Nima Tamang's account of events leading to her second marriage, set out in section 7.6. Forceful capture, whereby women are abducted without their consent, is a relatively rare event in Jetthul and in other Tamang communities both in west (Holmberg 1989:60) and east Nepal (IDS 1986:30).

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[10] A pseudonym.

[11] Chetris are generally regarded to be higher in the social hierarchy than Tamang, this is set out in chapter 2 section 4.3.

In response to the formal survey question: "*Was this (your first marriage) a capture marriage?*" 14 women initially reported that their marriage had been initiated in this way. Further detailed enquiry revealed over half these 'capture' marriages (n=8) to have been sanctioned by parents and the bride prior to the 'capture'. I therefore categorised these eight marriages as consensual, non-forceful, 'convenience' capture. The initial exaggerated reporting of capture marriages underlies its employment in masking complicating realities and responsibilities, and overcoming social impediments to desired unions, examples of which are set out earlier in this chapter.

Ethnographic enquiry and deeper cross-referencing of quantitative data revealed that six of the original 14 reported 'capture' marriages were clearly cases of abduction, where neither the 'bride' nor her family had given prior consent to the capture. Five of these six abduction capture marriages occurred before construction of the road, when forceful capture accounted for almost 20% of all marriages (illustrated in figure 7.2). Among marriages that took place following road construction, only one was initiated by forceful capture, indicating a reduction in the practice of forceful capture marriage and increasing 'convenience' capture following the advent of the Lamosangu-Jiri road. While this trend is not likely to be a direct effect of the road *per se*, it reflects the agency of the road in the diffusion of on-going social change from urban areas.

Although only 14 of the 54 marriages were initiated by 'capture', comparing the incidence of forceful and consensual capture according to the relatedness of marriage partners reveals certain patterns. Figure 7.5 illustrates a higher proportion of both types of capture marriage to have occurred between cousins than non-cousins.

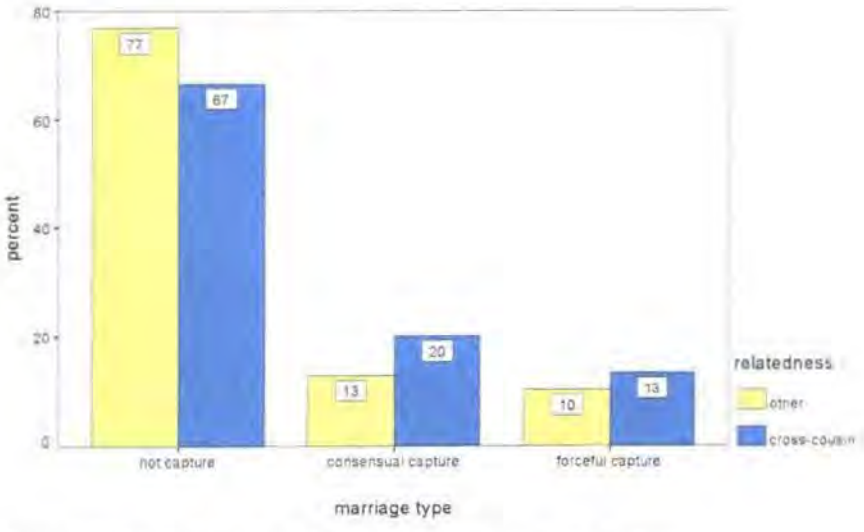

Figure 7.5: Capture marriage by relatedness of marriage partner.

While abduction of women for marriage has declined over time in Jetthul, its occurrence remains more common among cousins than non-related spouses. This reflects its occasional use by a groom's kin in response to a woman's refusal, or protracted delaying of a marriage approach made on behalf of her cousin, who is regarded to "have a right" to her. When a woman refuses her cousin, he and his clansmen may resort to force, sometimes with the 'bride's' father's permission, as he may be compromised in being seen to refuse his own kin.

The higher incidence of consensual capture between cross-cousins, compared with non-related partners also reflects its usefulness in achieving specific alliance objectives without risking alienation of valued relationships. In delicate negotiations, the mask of capture removes responsibility from the bride and her parents, diffuses a charged situation and avoids loss of face by interested parties. In times of financial hardship, marriage by 'capture' also serves to lower expenditure, as ceremony is reduced. This has been observed in other Nepalese communities to the same effect. Jones and Jones (1976:66) report that almost 20% of Limbu marriages in east Nepal are initiated by "theft", to disguise reduced-cost consensual unions, and Watkins (1996:134) found elopement to be employed as a means of decreasing the expenditure of formal marriage among the Nyeshangte. Holmberg (1989:60), furthermore observed consensual capture to be the most common form of matrimony among the Tamang of west Nepal.

7.6 Incidence of marriage dissolution and empowerment of women in its initiation

Marriage dissolution in Tamang society is not of the complex legal nature of that in many western societies. Nor does it attach social stigma as in other (mainly Hindu) communities in Nepal. Tensions originating from a variety of sources arise, especially within extended households. During the first years of marriage household members experience change as new brides arrive and women contend with their new roles as wives, sisters- and daughters-in-law. For brides themselves this is particularly stressful, as they must adapt to their altered status and security and the existing relationships within their marital home. For women marrying into villages where they have few friends, relatives or other familiar personal support, life can become particularly distressing. Daughters-in-law are expected to co-operate in domestic and farm work and although in some households close bonds can form between in-marrying women, depending upon individual personalities, some can become competitive, especially when they have small children who form the centre of their interest, time and attention. For

many women in difficult marital situations, life improves as they have children and eventually establish their own nuclear household. Others, who find their situation intolerable, leave their marital home. While some families are able to overcome the teething difficulties inherent in the early years of marriage, for others difficulties are insurmountable.

With the high degree of spousal separation that became evident throughout chapter 4, there are clearly opportunities for married women to form extra-marital romantic attachments. Because the Tamang, unlike the dominant Hindu culture, are more sexually permissive (see section 2.4.4), relationships occur outside marriage that occasionally lead women to abandon their husbands and remarry lovers. In Jetthul, marriage is terminated by couples separating and new marriages commenced by setting up home with new partners. A similarly unstigmatised regard of 'divorce' and remarriage is reported among many Nepalese hill groups, including western Tamang (Holmberg 1989:60), Nyeshangte (Watkins 1996:133) and eastern Limbu (Jones & Jones 1976:5). It must be stressed that social sanction does not equate with the level of stress that broken marriages cause both to the couple themselves and wider kin. As women's *daijo* property remains inalienable theirs, its removal with the desertion of a wife can represent a significant loss to the marital household's economy. Alliances forged through strategic marriages are also put at risk by a couple's separation and deep rifts can emerge between households. Wronged families may demand compensation for nuptial expenses and cuckolded spouses demand financial recompense, giving rise to grievances. Young children also become separated from their mothers when their parents' union is dissolved, as Tamang custom prescribes that weaned children of terminated marriages reside with their father.

Jetthul women who were identified in the survey as having been married more than once, were asked about the termination of previous marriage(s) to determine the incidence of marriage dissolution among the community before and after the road was built. Firstly, questioning determined which marriages had ended due to the spouse's death and which due to separation: "*How did your (first/second/etc.) marriage end? Did you separate or did your husband die?*" Then the nature of, and women's participation in separation was explored by asking: "*Did this marriage end by your choice, your husband's choice, or did you both decide together?*"

Only three of the 54 ever-married women in Jetthul had ever permanently separated from their first spouse and none of the women had been married more than twice. This indicates a divorce rate of almost 6%. One of these women separated from her first husband before completion of the road and two of the women after this time. The incidence of marriage dissolution is too

low for any meaningful statistical analyses and inference concerning social change following road construction. There is, however, no evidence to suggest that there is a rising trend in women abandoning their marriages in favour of new romantic attachments, as Sacherer (1990:22) has noted among some LJRP communities since road provision.

Extracts from my field notes provide a brief profile of the 'divorced' women and insight into marriage dissolution and remarriage in Jetthul:

> Nima[12] Tamang aged 44, married her first husband, whom she had known for seven years, when she was 20 years old. She describes her first marriage as a 'love marriage'. Initiated by her first husband, he did not ask her father for her in the traditional manner of offering *chang*, and no gifts were exchanged between their families.
>
> After six months of marriage, she left her husband's house and moved to the household of Tul Bahadur,[13] five years her senior, who squats here by the fire with her 24 years later.
>
> Although her 'divorce' and 'remarriage' happened so long ago, she recalls, with a twinkle in her eye, that Tul Bahadur took her for his wife 'by capture'. Caught up in the romance and excitement of events at that time, she lets slip that theirs was in fact a 'love marriage', and that she met Tul Bahadur through friends after her first marriage. It is obvious to me and others around the fire that theirs had been a highly romantic and seductive marriage that began with elopement. Nima adds that she did not dare return to her natal household until a year after going to live in Tul Bahadur's house.
>
> Neither of Nima's marriages involved any form of traditional exchange such as *chang*, clothing or other gifts. Importantly for her natal kin, neither of her husbands ever performed free labour for them. They have seven children aged between 20 and two years.
>
> (Field notes 25 September 1989)

> Sancha Maya's first marriage took place 'last year' when she was aged 16. This traditional marriage was initiated by her husband's kin visiting her natal household with *chang*. She had not met her first husband before and he was not a 'cousin-brother'. Cloth and other gifts were later given by his family to hers and Sancha Maya's parents gave her *daijo*[14] comprising some silver, a little cash and five chickens.
>
> After living with her husband in his parent's household for one unhappy year, she decided to abandon the marriage and returned to her natal home, taking her *daijo* with her. Now aged 17, she lives with her second husband aged 20 and they have a 10-month-old son, Babu. Sancha Maya is very unforthcoming about events that led up to this union. I am not sure if she is unaware that the time frame she has given me is confusing, but it is clear she does not want to discuss details. When I ask her husband's name, she says she 'doesn't know'.[15]
>
> (Field notes 19 November 1990)

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[12] A pseudonym.

[13] A pseudonym.

[14] Gifts given by the bride's parents to the bride at marriage.

[15] In Jetthul, it was not unusual for a woman to forget or not know the name of her husband as she may refer to him always as 'husband'. Similarly children's names often become forgotten through disuse, when a younger son may become 'named' by his position in the family, i.e. *Chang-bar*^{T} ('Younger son'). In this case, however, the respondent did not want to discuss details of leaving her first husband and setting up home with her second, which she made clear by her evasiveness.

Kamala Tamang was married to her father's sister's son at the age of 23. She says that she was reluctant to accept the arrangement as her aunt had married into a village in Dolakha,[16] over a day's journey away. "I did not know this place. None of my sisters [female friends and relatives] lived there. I was afraid." Kamala, however, did not object to the union when her uncle came to ask for her with his clansmen. "My mother and father decided this for me. My father drank the *chang* and I did my duty." As their only daughter, Kamala's parents gave her a relatively large *daijo* of a goat and two chickens, a quantity of grain, NR 700 and some gold jewellery.

Kamala said she felt lonely from the time of her arrival in her husband's household. Although her aunt was very kind to her, her husband's older brother's wife, who had an infant son, treated her badly and Kamala felt she had to do more than her share of domestic and farm work and "... cried every day." After a few months she ran away and returned to her parents house in Jetthul, closely followed by her husband and father-in-law who demanded her return. This situation placed Kamala's father in a difficult position. Although very loving towards her, he insisted that she return to her marital village. Kamala said she returned and ran away many times until her elder brother, who had formed his own nuclear household, allowed her to stay there.

For several years after deserting her husband there was tension between Kamala and her parents and between her natal and marital relations. Eventually, a mutual agreement was reached between the two, and Kamala's father paid a token amount of cash to her in-laws as compensation for the wedding costs incurred and loss of her *daijo* property to their household. Since this time, Kamala has remained with her brother, assisting with his agro-pastoral and domestic labour. She says that she is much happier now and clearly enjoys the close contact with her nephews and niece.

(Field notes 11 November 1990).

7.7 Comparison with the Tamang Family Research Project

7.7.1 Sphere of acquaintance with first spouse

Table 7.7, after Fricke and Thornton (1991), categorises the reported primary sphere in which couples met, according to whether it was through kin, by meeting in the neighbourhood, or in other non-kin arenas. Compared with Jetthul, both TFRP communities, exhibit lower percentages of couples meeting through kin. This is lowest overall in rural off-road Timling at 34% of marriages, compared with 63% in Sangila and 76% in Jetthul. Both TFRP communities also exhibit a decrease in meeting spouses through kin over time, unlike the Jetthul community, where there is an increase in marital introductions through family over time.

Meeting spouses in the neighbourhood, independently of kin, has increased across all three settings over time. There are, however, marked differences in the proportions of women meeting their spouse in this way, in the three communities. Substantial proportions of TFRP marriages, 50% in Timling and 24% in peri-urban on-road Sangila, resulted from such acquaintance, whereas among the women of Jetthul, only 2% met their husband in this way.

[16] Dolakha District lies adjacent to Jetthul VDC and is shown in figure 3.1 in chapter 3.

	Timling off-road			Sangila on-road			Jetthul near-road		
	< 1946	1966 -75	total	< 1946	1966 -75	total	pre-road	post-road	total
through kin	40	23	34	69	61	63	70	81	76
neighbourhood	44	52	53	21	25	24	0	4	2
other	16	27	14	10	14	13	30	15	23

Table 7.7: Women's sphere of acquaintance with husbands, by birth cohorts in TFRP communities and marriage cohorts in Jetthul.

Over time there has been an increase in women from the TFRP communities meeting their first husbands through 'other', non-family organised activities such as fairs, dances, at work or while travelling. A more marked increase is apparent in the off-road setting than in the on-road community. In Jetthul, the decreasing trend of meeting marriage partners in these ways is partly due to the inclusion of abduction capture marriage in this category. Calculation of this category, excluding capture, does not alter this trend, but reduces the differential to 3% and brings the total percentage closer to that of Sangila. While the wide differential in sample size reduces the salience of Jetthul quantitative data in a three-way comparison, the decline in spousal acquaintance via kin over time among TFRP women may reflect their wider pre-marital residential and work experience revealed in previous chapters of this thesis.

7.7.2 Spouse selection

Comparing transformations in spouse choice over time in the three settings, there is correspondence between the proportion of marriage partners chosen by senior kin alone in the 'pre-road' marriage cohort in Jetthul and the pre-1946 birth cohort in the TFRP communities.

	Timling off-road			Sangila on-road			Jetthul near-road		
spouse selection	< 1946	1966 -75	total	< 1946	1966 -75	total	pre-road	post-road	total
senior kin	51	27	40	58	52	54	56	78	70
bride+groom	31	31	30	32	25	33	0	0	0
bride alone	18	42	30	10	23	13	1	0	1

Table 7.8: Spouse selection by birth cohorts in TFRP communities and marriage cohorts in Jetthul.[17]

Data set out in table 7.8 shows that whereas over time there has been a substantial increase in senior kin selection of spouses in Jetthul, both the on-road peri-urban (Sangila) and off-road rural (Timling) communities of the TFRP exhibit a decline in this practice. In Timling the

[17] These data are not directly comparable beyond the figures for 'senior kin' choice. In the Jetthul community, 19% of women reported that the decision to marry had been made by them together with their parents. Another 11% of marriages in Jetthul were forceful 'capture' marriages and occurred without the prior consent of the bride or her parents.

proportion of autonomous couples choosing together remains stable throughout the generations under observation. The declining proportion of kin-introduced marriage partners that is most marked in this off-road rural community is reflected in the substantial increase in female choice of marriage partner over time.

In the on-road peri-urban community of Sangila, while there has been a decline in couples forming their own romantic attachments, there has been a marked increase in female autonomy in spouse selection. In Jetthul the very low level of female participation in spousal selection and lack of marriages decided by couples alone may be an effect of the differential sample sizes, it is most likely that these data reflect the wider pre-marital experience of TFRP women, which appears to have had a more potent impact upon their autonomy than roads provision alone in Jetthul. Analyses of economic and social change in the TFRP communities quantitatively indicate that increasing Tamang female participation and autonomy in spouse choice is linked to freedom from senior kin supervision and increased experience outside the family and village sphere (Fricke & Dahal 1996:391; Fricke & Thornton 1991). Previous chapters of my thesis have revealed that factors associated with increasing empowerment of young people such as non-agricultural income generation (Bernhardt 1993:80; Ahmad 1991:31) and non-family mediated activities (Dahal & Fricke 1998:69; Watkins 1996:254) are low in Jetthul compared with the two TFRP communities.

7.7.3 Cross-cousin marriage

Data set out in table 7.9 show that of the three settings, the rural off-road settlement of Timling exhibits the highest proportion of cross-cousin unions. This has declined only slightly since the earliest recorded marriages. The overall incidence of cross-cousin marriages in the on-road peri-urban setting of Sangila is markedly lower than in Timling. Marriages of the most recent birth cohort in Sangila display a sharp decline in the traditional marriage ideal between cross-cousins. Also unlike among the TFRP, in Jetthul there is a slight increase in traditional cross-cousin marriage since road provision.

	Timling off-road			Sangila on-road			Jetthul near-road		
Marriage type	< 1946	1966 -75	total	< 1946	1966 -75	total	pre-road	post-road	total
cross-cousin	72	69	71	50	39	50	26	30	28
unrelated	28	31	29	50	61	50	74	70	72

Table 7.9: Cross-cousin marriage by birth cohorts in TFRP communities and marriage cohorts in Jetthul.

Although the overall occurrence of cross-cousin marriage is markedly lower in Jetthul than in the TFRP communities, it is at a similar level to that reported by March (1979:209) among Tamang in rural west Nepal. While there has been an increase in involvement of young people in the marriage process over time in the TFRP communities, continuation of traditional parental control of the marriage process is evident in the persistence of cross-cousin marriages. This has been maintained at a consistently high level in off-road Timling, but has declined over time in on-road Sangila. This reflects the primary and ongoing concern for manpower in rural communities, where the formation of reciprocal alliances ensuring free labour is of prime importance. In the peri-urban on-road community, however, the more monetised and non-agricultural setting has brought about a shift in the values inherent in marriage alliances. Although most families in Sangila continue to farm family land, as I set out in chapter 4, a higher proportion of individuals are employed in the non-agricultural labour market and connections within the income-generating arena have become more desirable characteristics for consideration when forming alliances through marriage (Fricke, Axinn & Thornton 1993:413). This reflects a growing trend in Asia, where increasing monetisation and urban contact are associated with declining traditional brideservice and cross-cousin marriages. According to Caldwell and his colleagues, this is due to a shift in alliance-building away from assured agricultural labour through reciprocal kin obligations, towards more highly prized non-agricultural labour connections. Increasing exposure to urban life is, furthermore, attributed with the erosion of traditionally favoured consanguineous marriage, via the adoption of the 'imported' concept that unions between related partners lead to illness in children (Caldwell *et al.* 1988:87).

7.8 Discussion

Although road provision in some Nepalese communities is associated with increasing female autonomy (Adhikary *et al.* 1990:25), erosion of traditional marriage patterns (Hamill *et al.* 2000:90), and a rising number of unions resulting from "love matches" (Sacherer 1990:21), in this chapter I have shown that in Jetthul, there is an overall predominance of marriages conforming to traditional practice that has been maintained since construction of the road. A high proportion of nuptial decision-making is made by senior family members: the majority of marriages are initiated by grooms' parents and the majority of acceptance decisions and spouse choice made by brides' parents. Although women married since road provision met their spouses through a slightly wider variety of contacts than those married before, they did so within the family and neighbourhood arena. There has also been a slight increase in the tradition of marriage initiation by grooms' parents and a substantial proportional increase in

spouse choice by brides' parents. Although these increases are due in part to the decline in capture marriages, they indicate the continued strength of parental control of marriage over time in Jetthul.

The central role of parents in nuptial decision-making is also evident in the high proportion of women meeting husbands through their parents and that fewer than half the women had pre-marital acquaintance with their husbands. A higher proportion of couples married after construction of the road met through parental arrangement, suggesting that despite the road linking the community to urban centres and the wider nation, the traditionally high level of parental control of marriage had been maintained. Over time, female autonomy in the initiation of the marriage process and participation in the choice of spouse has remained low, but my findings indicate the low level of autonomy in the marriage process to be *generational* as much as genderal in nature. While a proportion of women's husbands were proactive in initiating the marriage process through forceful capture, the proportion of young people making their own marital decisions has remained consistently in the minority over time.

Considering the relatively high level of pre-marital female contact with Kathmandu (and the quantity of mass-media girls are exposed to there), in light of research linking such experience with increasing autonomy in the marriage process (Hamill *et al.* 2000:90; Caldwell & Caldwell 1976:384), the lack of detectable social change evident in rising female autonomy in nuptial negotiations is initially counter to expectations. In chapter 4, however, I showed that women's working lives have become increasingly 'traditionalised' and that their labour has consequentially become pivotal to household subsistence, with the rise in male economic migration that road provision has encouraged. Customary senior kin control of nuptial alliances and changes in household and reciprocal labour they engender have, as a consequence, become crucial to maintaining agricultural production and the economic survival of Jetthul households. This is further evident in the maintenance of the cross-cousin nuptial ideal, that engenders the highest level of security in reciprocated labour from son's-in-law to their wives' natal households, that relinquish their daughters' labour through marriage. Rather than influencing increasing female autonomy in the marriage process by accelerating the diffusion of social change from the outside world, road provision in Jetthul has in fact, indirectly influenced maintenance and indeed strengthening of senior kin control of nuptial alliances. Any diffusion of wider social change that may have induced a rise in female nuptial autonomy has been subjugated by household's on-going concerns to maintain scarce labour resources in the marginal economic circumstances of Jetthul.

The attribution of individual impacts to road provision is notoriously difficult, particularly in *post hoc* studies of this kind. Although the Lamosangu-Jiri road has had a marked impact upon male migration that has undoubtedly confirmed traditional marriage alliance concerns, other factors also act to stimulate social and economic change relating to female autonomy in the nuptial process. In communities along the Lamosangu-Jiri road where a trend of rising female autonomy has been detected, increasing female education and literacy have been noted to be important antecedents (Adhikary *et al.* 1990:27; Sacherer 1990:18). Although chapter 6 revealed a situation of increasing female schooling in Jetthul, considered within the national context, female education and literacy remain markedly low. The potential effects of education in stimulating female autonomy (Mensch & Lloyd 1997; Niraula 1995:77) remain undeveloped among Jetthul women. Female employment outside family-centred subsistence, also associated with supporting female autonomy (Sen 1997:10), in chapter 4 was shown to be similarly low in Jetthul. Marked changes in marriage customs have also been noted following development and infrastructural changes as a consequence of transport development in Nepal. Hamill *et al.* (2000:90) have commented upon the situation in the Jiri valley:

> The traditional Jirel marriage pattern of community endogamy and clan exogamy has weakened considerably, and the traditional structured reciprocal clan-based marriage patterns are being replaced by marriage for the sake of upward mobility.

Given the lack of agricultural and commercial development in Jetthul set out in chapter 4, however, there have not been adequate changes in the local economy to stimulate such a divergence from traditional marriage patterns. There is clearly a constellation of circumstances, some of which are influenced by road provision to a greater or lesser extent, that impinge upon the Jetthul community and have acted to maintain the lack of nuptial autonomy of young people, and women in particular.

Social change relating to female empowerment in the contract of marriage is arguably evident in the occurrence of forceful capture marriage over time. Since construction of the Lamosangu-Jiri road there has been a marked decline in marriages initiated by forceful abduction, the form of marriage involving the least empowerment of women. This may reflect a decreased tolerance of abduction by the community, and declining female acceptance of marriage initiation in this way. While this trend cannot be directly attributed to road provision, the decline in this practice may, at least to some extent, be influenced by the increasing exposure of Jetthul's pre-marital women to urban experience that was reported in chapter 5. This has been noted as influencing changes in traditional Nepalese family structure following road provision (Shrestha 1998:17). By absorbing a broader perspective of female life,

courtship and romantic relationships during urban visits and especially with increasing access to cinema, television and video entertainment, young Jetthul women have come regard forceful capture as an unacceptable form of marriage initiation. Although marriages initiated specifically by capture are not featured in analyses of TFRP marriage data (Dahal & Fricke 1996; Fricke 1995; Fricke, Axinn & Thornton 1993; Dahal & Fricke 1993; Fricke & Teachman 1993; Fricke *et al.* 1991; Fricke & Thornton 1991; Fricke 1985), there is, evidence that some Nepalese communities traditionally condoning marriage by capture have, with time and broadening spheres of action, come to regard the practice as undesirable in modern, cosmopolitan society. Pfaff-Czarnecka comments that declining capture marriage among the Thakalis has been part of a conscious effort to elevate the standing of the community in wider society:

> The Thakalis took several measures in order to raise their collective status such as: ... removing stigmatising practices such as drinking beer and marriages by capture, which formerly rendered them 'wild and uncivilized'... (1997:438).

Acharaya & Bennett also report capture marriage to have completely died out among the Kham Magar (1981: 88) for similar reasons. Conversely, Watkins reports an increase in "kidnap" marriages among urban-dwelling Nyeshangte youth. Rather than indicating a decrease in Nyeshangte female autonomy in the nuptial process, it is employed by young couples to exert their personal choice of marriage partner in the strategic avoidance of parental spouse selection (1996:135).

Accounts of the few divorced Jetthul women show them to have been proactive in the termination of their first marriages, which is regarded to be indicative of empowerment within marriage, even where there may be low female autonomy in the nuptial contract (Folmar 1992:235; Jones & Jones 1976:170-1). The incidence of marriage dissolution is highly variable among Nepal's many ethnic and caste groups, ranging from extremely rare among high caste Hindus, to more frequent among non-Hindu hill communities (Folmar 1992:235). The national rate of reported divorce is low in Nepal at 1.2%, although there has been an increase in its occurrence over the last three decades (CBS 1995: 176). Data concerning marriage termination among the Tamang are lacking. As divorce has not been the focus of TFRP analyses to date, comparisons with Jetthul data are not possible. However, almost 20% of married Tamang women are reported to leave their husbands' household in rural Siauli, Sindhupalchowk (IDS 1986:35), and Holmberg suggests marriage dissolution to be a more common occurrence in west Nepal (1989:60). At around 6% in Jetthul, marriage termination is higher than the national rate, but lower than among other rural Tamang for whom data are available.

While the incidence of marriage dissolution and remarriage is low in Jetthul, this is not due to lack of social tolerance as there is no stigma attached to 'divorce' and remarriage among the Tamang (Fricke 1993:136; Holmberg 1989:60; IDS 1986:43-35) and other Tibeto-Burman groups (Watkins 1996:133), as is the case in other, especially Hindu communities in Nepal (Majupuria & Majupuria 1989:24; Bista 1987:22; Acharaya & Bennett 1981: 78-82). Although Tamang women enjoy a relatively high level of autonomy within marriage and display a high level of self-determination in cases of marital dissolution, the disruption and distress of deserting a marriage engenders particular difficulties for women. As married women usually reside in their husband's or his parents' house, they have the problem of finding a new home when their marriage ends. In some cases, returning to the natal home or that of a brother may be prevented by the social turbulence of the dissolution of the marriage. Because of families dependence upon the economic alliances formed through Tamang marriage, women risk being shunned by their natal family for a period following separation. A further consideration is that in common with other hill groups (Watkins 1996:133), all weaned children of divorced Tamang parents customarily remain with their father. Marital fission therefore, entails separation of mothers and their children.

From a western perspective, female autonomy is low in Nepal, but within Dyson and Moore's (1983) theoretical framework, Tamang society is relatively gender egalitarian within the Asian and national context. In this chapter, however, I have shown that since the advent of the road, there has been no significant change in the low level of female autonomy in the choice and acceptance of partners at first marriage. In spite of broadening female pre-martial experience since road provision, continued poverty and chronic family labour shortages in communities where agro-pastoralism remains the primary mode of production act to maintain senior kin control of the marriage process. This necessitates alliance building between households and assurance of reciprocal labour, through strategic marriage and the suppression of autonomous choice of marriage partners among Tamang youth. Secure, arranged marriages remain of central importance to rural agrarian families and even in the most gender egalitarian of Nepalese societies, in which women have a high level of financial, entrepreneurial autonomy and a wide sphere of action, parental control of the marriage process remains high (Watkins 1996:134). This situation, common to subsistence-farming communities in low income countries in Asia, is summarised by Dyson and Moore:

> In agrarian societies most major personal decisions are strongly influenced and constrained by kinship, family, and marriage relationships (1983:45).

Female autonomy in the marriage process is regarded as a significant determinant of marital fertility and the adoption of family planning in LICs (Jejeebhoy 1995; UN 1994:23; UNFPA 1989). In Nepal, research has shown female self-determination to be similarly closely linked to the desired number of children and demand for contraceptive services (Niraula & Lawati 1998:170; Morgan & Niraula 1995:541,558; Acharaya 1995:159). In light of this, the lack of change in customary nuptial practices in Jetthul that engender low female autonomy do not bode well for changes in fertility desired by HMG and agencies addressing Nepal's high population growth.

Chapter 8

Fertility and use of health and reproductive services

In Nepali society, childbearing is central in defining a woman's identity, affirming her worth, and establishing her position in her household and in her husband's kin group.
S.R. Schuler & M.C. Goldstein 1985:2

I don't want to die in childbirth, Sister Kate. Bring me medicine to stop another child coming.
Basun Tamang of Samche, aged 39

8.1 Introduction

Recent macro (Retherford & Thapa 1998; Aryal 1998; NFHS 1996) and micro-level studies (Karki 1998; Dahal & Fricke 1998; Axinn 1992a; Folmar 1992) have indicated that Nepal has entered the early stages of fertility transition. While the pace of fertility decline is judged to be gradual (Acharaya 1998:106), the national total fertility rate (TFR) has decreased from 6.6 to 5.1 in the two decades since 1971 (CBS 1995:69). Of particular pertinence to my own study of the effects of the Lamosangu-Jiri road on the female population of Jetthul, is the sharper rate of decline in TFR exhibited in urban areas of Nepal[1] (CBS 1995:74). From the early development of the LJRP/IHDP, addressing the low use of contraception and poor access to modern health facilities were regarded as prime project objectives. Indeed, the success of Swiss project intervention was to be assessed in part by the level of acceptance of family planning methods and improvements in access to bio-medical outlets (Basler & Hoffman 1975:11). Since the remoteness of Jetthul from Kathmandu has been reduced with the advent of the road, a major spatial barrier to the diffusion of family planning concepts and services has been potentially removed. This gives rise to the question of whether behaviours influencing

[1] The TFR of urban areas declined from 5.8 to 3.5 during the inter-censal period 1981 - 1991. During the same period TFR of rural areas decreased from 6.4 to 5.8 (CBS 1995:74).

fertility decline have diffused to the community since Jetthul has been linked to Kathmandu by road.

Previous chapters in this thesis have explored social and economic aspects of female life in Jetthul that are indirectly linked to reproductive behaviour, but the causal nature of which remains largely unspecified. In this last chapter of my findings in Jetthul, I examine more direct determinants of fertility, including age at marriage and first birth, contraception and breast-feeding. In the analysis of the influence of socio-economic factors on fertility, Bongaarts (1978:105) proposed that greater understanding of demographic change would be achieved by examining components of fertility, through which socio-economic factors act. These he termed "intermediate fertility variables" and his analytical model incorporates three categories of variables pertaining to fertility within marriage. These are: 1) factors concerning exposure to pregnancy 2) intentional fertility control and 3) natural fertility. In my examination of change in variables relating to fertility and reproductive behaviour since the advent of the Lamosangu-Jiri road, aspects of female life I explore are representative of each category of variables in Bongaarts' model. In this way, I present an analysis of quantifiable constituents of fertility together with ethnographic data to assess whether there has been detectable change in Jetthul since road provision.

8.2 Objectives

In order to present a situation analysis of variables and behaviours directly impinging upon fertility and to determine whether there has been detectable change since construction of the Lamosangu-Jiri road, I set out to:

- examine perceptions of childbirth and the value of children;
- assess attitudes and access to contraceptive, reproductive and health services;
- determine the use of contraception and deliberate avoidance of conception.

In order to explore patterns of fertility, I:

- quantify the mean number of children born to women;
- determine the infant mortality rate for the Jetthul community;
- quantify the age of women at marriage and compare the age range and mean age at marriage for women married prior to and following road construction;
- determine the age of women at the birth of their first child and compare the means for women married before and after construction of the road;

- quantify the time lapse between marriage and first birth and compare these periods in the 'pre-' and 'post-road' marriage cohorts;
- profile breast-feeding practice and duration and determine whether there has been change in infant feeding since the advent of the road.

8.3 Perceptions of childbirth and the value of children

In Jetthul a mixture of emotions surrounds childbearing. While the joy of the birth of a child is apparent among new mothers and they are bathed in the approval of their in-laws, the period leading up to delivery is one of anxiety for most women, especially those awaiting their first birth. The Tamang of Jetthul do not have a tradition of birth attendants (called *sudeni*) and many women deliver their children alone, although some accept assistance from female in-laws. In the absence of experienced birth attendants there is little reassurance for women during labour. The nearest doctor is over 30 km from Jetthul in Barabise, requiring those in need of emergency care to walk or be carried uphill to the roadhead before continuing by motorised transport. There are no services at the village level to alleviate peri-natal health risks to mothers and infants, which is reflected in the not uncommon occurrence of maternal and infant mortalities. Memories of peri-natal fatalities of female friends, neighbours and relatives are regularly revived in women's discussion of childbirth, when they voice their anxieties concerning the pain and fear of death associated with delivery, as this extract from a taped informal interview illustrates:.

KM: ...and you have a son, how long after you were married was he born?
MT: Three years after marriage.
KM: ...and have you given birth to any others?
MT: ...no...just one son.
KM: So how many children would you like?
MT: I am afraid of dying...the pain!...the pain is very bad, you think you will die! My husband's sister helped me but I was afraid...I didn't know anything! I don't want the pain, I am afraid to give birth another time....

(Mina Tamang aged 24)

The nature of childbirth in Jetthul is illustrated by the experience recounted to me by Suna Tamang who was 23 when her first child was born. Like most of the women in Jetthul, she continued working in her family's fields until the onset of labour. Her story of the birth of her first child illustrates the vulnerability and solitary nature of childbirth for young women in Jetthul:

"It was in *Magh* [January/February], I was spreading cow dung over the fields when the pain began..." Suna returned to her home and squatted down behind her house where it was most secluded. Like most Tamang women in Jetthul, she delivered her child outdoors as to do so in the home would "make it dirty" both physically and spiritually.

For the whole labour she remained alone, cutting the umbilical cord with her sickle and tying it with string. I asked why she did not have her mother-in-law with her and she replied that she "felt embarrassed" and wanted to be alone.

After washing and massaging her newborn son with mustard seed oil, Suna wrapped him in cotton fabric and took a meal of rice "in a lot of water". She also drank *chang* (millet beer) and *rakshi* (rice spirit). In the next few days her mother-in-law prepared high protein and energy meals for her of chicken, eggs, *ghee* and milk.

Suna's delivery was uncomplicated and her help was needed to plant the potato crop, so she returned to working in the fields 11 days later, taking her infant son with her in a basket.

(Field notes, 11 November 1989).

Plate 8.1: A mother taking her infant to the fields

Plate 8.2: An infant exhibiting signs of umbilical hernia

While Suna recounted using her sickle to sever the umbilical cord, traditional knives called *khukuri* are also used together with a *paisa* coin. As these implements are unstertilised, some infants develop infections, notably neonatal tetanus and there are also occasional cases of umbilical hernia due inadequate cord tying techniques.

Customarily, women in Jetthul are allowed some three weeks recovery post-partum, but the intensity of the agrarian cycle means that many return to work one or two weeks after delivery (as Suna's case illustrates). The period of time taken out from work appears to adequately provide for women and their infants to establish breast-feeding. None of the women who gave birth during my field research experienced protracted problems with latching-on or suckling. Although the majority of women voice concerns about the quantity of their milk production, I could detect no problems of infant nutrition directly relating to breast-feeding in the first few months *post-partum*.

The Tamang of Jetthul, like the majority of Nepalese communities, are traditionally strongly pronatalist and the birth of a woman's first child, especially a son, is generally regarded as a source of great happiness (Fricke & Teachman 1993:179). Childbirth confirms continuation the family line and, as I showed in the previous chapter, ensures the household's future participation in alliances and exchange central to Tamang culture. Bearing offspring also endorses women's value in maintaining the lineage, and labour force, and thereby providing future security for senior household members. In so doing, the birth of the first child establishes a woman's position within her marital household (Aryal 1998:87; Schuler & Goldstein 1985:2). Male offspring are crucial to parents' spiritual and economic well-being. Sons not only support their parents in old age, but also perform an essential role in their funerary rites. As chapter 4 illustrated, the continued low technology and labour-intensive nature of agro-pastoralism maintains the flow of wealth from offspring to parents and the need for renewal of the family labour force. In addition to Tamang emotional, social and cultural needs for children, therefore, there is also a strong economic imperative for offspring. The more surviving children in a family, the greater the security of the household workforce in the following generation and the decreased vulnerability of senior family members in old age (Zivetz 1992:35; Nag *et al.* 1978:300). The social and economic necessity for sons is one factor that drives fertility among the Tamang and other Asian communities, where two sons tend to be considered a basic requirement for future economic security (Ramachandran 2000:3; Sathar & Casterline 1998:78).

Throughout my time in Jetthul, however, I was regularly, yet discretely approached by women asking me for "medicine" to avoid pregnancy. Younger women with children generally asked for help in postponing conception for a few years, whereas older women with maturing families expressed the desire to avoid further pregnancies. Conversely, two women who had failed to conceive after many years of marriage asked me to help them become pregnant with western drugs. Exploration of local contraceptive availability and reproductive health care revealed problems in female access to services appropriate to their needs.

8.4 Access to contraceptive and reproductive health services

In spite of the development input of the LJRP/IHDP and improved access between the project area and the capital provided by the all-weather road, there has not been a local proliferation of bio-medical health outlets in the Jetthul area. Western-style health care of any kind at the local level remains sparse and access to family planning and reproductive health services is very poor. Local government health and family planning services are represented in part by the

Health Post at Dandarpakhar, some 12 km west along the Lamosangu-Jiri road. Unfortunately for the people of Jetthul, road provision has not led to an increase in the density and quality of local health services. Unlike some communities in central and western Sindhupalchowk, Jetthul does not fall within the catchment area of health and family planning projects such as the Boudha Bahunepati Family Welfare Project that serves a population of some 20,000 situated around Chautara, one of the principle towns of the district (World Neighbors 1994; Hinrichsen 1991:49).

Although the Tamang of Jetthul traditionally believe illness to be caused by angry spirits that can be exorcised by shamanic healers (*jhankri*), they are particularly eager to use allopathic medicines, especially those administered by tablet and injection. While the curative properties of western-type medicines are recognised, there is a firmly entrenched belief that they endow recipients with strength and vigour. Hepburn (1994:454-455) has noted in detail that local people attributed the survival of an Australian trekker, who was lost in freezing temperatures in Helambhu for over 40 days, to the strength gained from western medicines. Indeed, my stature (I was taller than all of the women and many of the men in Jetthul) and nutritional well-being were attributed to taking foreign medicine to make myself "strong". Throughout my fieldwork resentment surfaced concerning the perception that foreigners such as myself, were not sharing the power endowed by our "medicine". Indeed, this was the main area in which Tamang people expressed disappointment following provision of the Lamosangu-Jiri road. One woman's comments illustrate the way in which the LJRP raised the community's expectations and their subsequent frustration: "The Swiss came here and built the road. But you people – what have you given us? We are still poor and you foreigners are rich. You don't give us medicine to make us strong." This persistent theme is also evident in Soma Tamang's comments on local health provision that are included towards the end of this section.

Given the community's predisposition towards western-type medicine, an emerging situation of low use of the Health Post is initially counter to expectations. Reasons for this become clear by understanding the difficulties women encounter travelling to the Health Post, together with the nature and manner of the service offered there.

In spite of the motorised link from the Jetthul roadhead at Goli to Dandarpakhar, women who have visited the Health Post have tended to walk there. The journey time on foot is in the region of three hours each way. Although travel time could be halved by taking a bus along the road portion of the route (villagers still have to walk for between one and two hours up hill to

Goli), women continue to travel to the Health Post on foot. The bus fare of around 10 roupees (approximately 15 pence sterling) represents a substantial drain upon scarce household cash resources, especially given that this sum is equivalent to an adult's daily wage for cash labour. The situation of women in Jetthul is not unique in LICs, indeed, it has been noted in various settings that the poor are most likely to continue walking to health services following road provision (Airey 1991:277; Stock 1983:563). The poverty of people such as the Tamang of Jetthul therefore determines the road's lack of direct impact to improve the community's access to local health and reproductive services.

Among Jetthul women, use of the local Health Post is also greatly affected by the way in which the unit functions. Officially, the Health Post engages a male Newar health worker in charge to dispense basic health care advice. The power differential between the gender and *jat* of the health service provider and female clients reduces the potential efficacy and accessibility of the Health Post for Tamang women. Jetthul women are reluctant to ask for reproductive advice and contraception from a man, let alone one whose *jat* status, education and position endow him with authority to grant or refuse their requests. A further feature of the service that deters women who require health and contraceptive assistance is that the Health Post stocks only a limited range and sporadic supply of basic medicines and contraceptives, including oral contraceptive pills and condoms. The health worker, however, is often absent and the Health Post closed, which reflects the general situation of absent and inadequate staffing of health and family planning outlets in Nepal (Subedi *et al.* 2000:100; McIntosh 1993:7-1). These problems, which are widespread throughout Nepal and other LICs, have been found to severely obstruct use of health services, even following improvements in physical accessibility resulting from road transport development (Subedi *et al.* 2000:100; UNICEF 1992:121; Airey 1991:286). Furthermore, perceived poor quality and unreliability of service markedly decreases the time and distance potential patients are prepared to travel to health outlets, whether by motorised transport or on foot (Stock 1983: 563). This trend is particularly strong among pregnant women (Richards 1984:15). Given, as was shown in chapter 4, that married women have become increasingly bound to the village by the intensity of their work loads that have increased with male migration, they remain reluctant to walk for three hours to a poorly resourced, non-user-friendly and potentially closed facility.

Rather than seeking assistance from the health worker at the Health Post when they are ill, Jetthul people consult the village *jhankri*, as have previous generations, prior to the establishment of western-type allopathic medical outlets. The *jhankri* addresses illness

through a spiritual medium, often sacrificing chicks and chickens in an endeavour to exorcise ghosts and pacify angry spirits believed to be at the root of ill-health. Although this may involve a token payment or exchange with the *jhankri,* together with the cost of sacrificial fowl, such consultations are usually cheaper than using the Health Post. Although consultations are notionally free at government health outlets, prescribed medicines incur cash payments, whereas payments to the *jhankri* are generally made in kind. The reliable, local and less expensive healing offered by the *jhankri* has proven more attractive than that of the local bio-medical service, and the majority of Jetthul villagers bypass the Health Post altogether. As Richards (1984:16) has commented:

> A proliferation of government health centres [following road provision] may do little to draw people away from cheaper and more convenient private sources.

When indigenous primary health care fails to resolve illness that is perceived to be life-threatening, the sick are carried in a *doko* on another person's back, uphill to the roadhead and then directly on to a government hospital in Kathmandu. Although the regional hospital at Jiri, the end point of the Lamosangu-Jiri road, is much closer, political changes since 1990, reportedly resulting in the decline in clinical staff and resources there, have led many staff to abandon their posts (Subedi *et al.* 2000:99-100). As people reaching the hospital have found it to be without medical staff, word has spread and Kathmandu hospitals remain the primary choice for Jetthul patients seeking specialised and emergency medical assistance. Although the availability of motorised transport since road provision has shrunk the distance for Jetthul residents seeking secondary medical care in Kathmandu hospitals, if the quality and reliability of service were to be raised at the regional hospital in Jiri, the road might impact with greater efficacy in the treatment of severe and emergency cases. The pattern of bypassing local Health Posts following road construction, is not unique to Jetthul, but has been noted in other areas of Nepal (Shrestha 1998:15) and LICs (Medhi 1980; Stock 1983:568), which Richards (1984:16) suggests to be aided by road provision.

In Jetthul, even in extremely acute and life-threatening emergencies that clearly need medical assistance, the existence of motorised transport alone does not ensure that the sick gain access to the care they need. The following case illustrates the decision-making process of one Jetthul man when his wife become seriously ill. A Samche man, Bhim Tamang, asked if I would help his wife who was sick. When I saw Pema, his 26 year old wife who had delivered their first child two days previously, it was evident that she was haemorrhaging. Pema had a fever and was extremely pale and barely conscious. Bhim said that even though he had consulted the

jhankri, the previous day, his wife's condition had deteriorated and he feared for her life. I explained to him that although I would help prepare her to travel, Pema needed urgent medical assistance. Bhim was very reluctant to agree to this, which on a personal level, I found initially frustrating and distressing. With some consideration, however, I was able to appreciate Bhim's position. His parents were both dead and he lived alone with Pema, which presented problems in the care of their new-born son, if he took his wife to Kathmandu. His primary misgivings, however, surrounded the costs involved. Although he could make provision for someone from the village to help carry Pema and some of their belongings up to the road, he was aware that medical fees, added to bus fares and accommodation costs would force him into debt. The severity of his wife's condition also presented him the possibility that she might well die during the journey. This together with the general 'unknown' nature of urban bio-medicine made him very anxious. Fortunately, Bhim took the risk of transporting Pema to hospital in Kathmandu where she was treated successfully. Although Pema's recovery rewarded Bhim's courage, the couple subsequently suffered a protracted financial strain as a result of using the road to access vital medical assistance. This illustrates Airey's (1991:286) assertion that following the provision of motorised transport, for the poor, access to medical services is mediated by the ability to pay.

Apart from the *jhankri* and the government Health Post there are no other health services in the Jetthul area. Of particular concern to women is the lack of reproductive health care. As I mentioned in section 8.3, there are no traditional birth attendants (*sudeni*) resident in either Samche or Turana, as the Tamang villagers do not customarily favour birthing assistants. Despite the greater physical access afforded by the Lamosangu-Jiri road, none of the Ministry of Health's grass-roots level FP/MCH initiatives (set out in section 2.5.6) are evident in Jetthul. Due to the location of Samche and Turana almost two hours' walk down a steep slope from the road along a poorly maintained track, health workers are extremely reluctant to travel off-road to the villages, which have become neglected. During my period of fieldwork no visits were made by Auxiliary Nurse Midwives and only one visit was made by a Village Health Worker (VHW) who simply weighed some of the infants. As a higher *jat* Chetri, her attitude to lower, *matwali* Tamang women was condescending, which created friction between the health facilitator and her clients. The VHW did not offer contraceptive advice, and women said they were too embarrassed to approach someone with such a superior attitude regarding this matter.

Although subsidised condoms are stocked by the roadhead shop priced at one roupee a packet (approximately 1.5 pence sterling), which is within the means of many Jetthul households, they

are not used by the Tamang. Women laugh both at the ridiculous concept of a man covering his penis with a condom, and at the idea of their menfolk co-operating in using contraception. Poor dissemination of information about the application of condoms (for illiterate communities the vague diagrams contained in the condom packets do not indicate confident or effective use) adds to the mystery of their use and effects. Such poor information and awareness have been found to reduce the up-take of this method among Asian communities (Ramachandran 2000:3). These factors, together with the difficulties inherent in discrete use of condoms in sleeping space shared with all other household members, has not encouraged their acceptance in Jetthul. Apart from avoidance of this potentially effective, locally available contraceptive, of particular concern, given the rapid diffusion of the HIV virus in Nepal (Seddon 1998:35; AIDSCAP 1997:6) and its association with road provision (Malla 1997; Pande 1997), as I considered in section 1.3, is the avoidance of an effective barrier against sexually transmitted infections.

The only other locally accessible form of 'contraception' is, in fact, fertility termination. Since road provision, the area has been host to mobile sterilisation units and the men of some communities near the Lamosangu-Jiri road have elected surgical sterilisation, although acceptance varies widely according to *jat* (Sacherer 1990:43). While sterilisation is neither desirable, nor appropriate for younger women, as I mentioned earlier in section 8.3, some older women with maturing families expressed their desire to have no further children. However, no one in the Jetthul community has undergone surgery. Several salient issues were raised in informal discussions about the sterilisation units. While villagers understand that "operations" are performed that prevent a man or woman from having further children, the actual nature of the procedure and potential side-effects remain a mystery. Rumours of intense and prolonged pain and doubts about normal physiological and sexual function substitute for clear information and villagers continue to give the mobile units a wide berth, even though this service may have the potential to meet the needs of some more mature couples.

To determine quantitatively whether women or their partners had ever used any form of contraception or method of avoidance of conception, during the formal survey they were asked: "*A couple sometimes does something to avoid or delay becoming pregnant. Have you ever done anything to delay or avoid becoming pregnant?*" and "*To avoid or delay becoming pregnant, have you ever done anything such as staying apart from your husband, using a condom or having an operation?*" Quantitative formal survey and informal qualitative research revealed there to be no deliberate control of fertility either by the use of traditional or modern forms of contraception or intentional coital abstinence among the Tamang of Jetthul.

Unlike some other hill groups (Macfarlane 1976:245), women do not induce abortion as a method of fertility regulation, although it is not unknown among Tamang elsewhere (IDS 1985:22). Research has shown that indigenous herbal and mechanical methods of menstrual regulation and pregnancy termination tend to be administered by *sudeni* in rural Nepal (Thapa, Thapa & Shrestha 1994:260; UNICEF 1992:85). With the absence of a *sudeni* in Samche and Turana, there is no focal point of indigenous reproductive knowledge and assistance for women.

Given that mobile sterilisation camps have visited the area, condoms are available at the road head shop, and men (and as I showed in chapter 7, increasingly women) visit Kathmandu from where female oral contraceptives and spermicides can be readily obtained and brought back to the villages, this poses the question, does the community perceive a need for contraceptive services?

The answer to this question is that family planning requirements are sharply polarised by gender and conflicting interests between men and women concerning pregnancy and childbirth. Women in Jetthul, like those of other communities in Nepal, tend to have a preference towards fewer children than their husbands (Morgan & Niraula 1995:545). Once they have secured their position within the marital household, having produced several children, the pain and health hazards of further pregnancies begin to outweigh direct advantages. For men, continued fertility does not involve personal pain and risk of death, but provides further insurance against mortality of existing offspring and endorses virility (Ramachandran 2000:3). This, it has been asserted, provides less incentive for fertility limitation among men than women in LICs (Cleland *et al.* 1994:55). Whereas men tend to remain pronatalist throughout their reproductive lives, women become less so as their families become established. Informal discussions concerning available methods of contraception revealed women's concerns about their husbands' disapproval of their wish to contracept. The concept of using barrier methods, surgical sterilisation and even daily oral contraceptive pills are dismissed as possibilities as their "husband[s] would know." Female reluctance to discuss contraception with their husbands and fear of their disapproval is a major factor contributing to female unmet demand for family planning (Ramachandran 2000:3; Sathar & Casterline 1998:790). This elucidates why, in the face of *female* demand for family planning in Jetthul, condoms, the most accessible (but *male*) form of contraception at the village level, remain unadopted. As married women are bound to the village and the majority have limited experience outside Jetthul, they do not have regular personal access to female forms of

contraception, available in health outlets in urban areas (Karki 1998:180). Women wishing to use contraception without their husbands' knowledge are, therefore, thwarted by their lack of access to services and they suffer from the chronic, uneven distribution of health and family planning services in Nepal (UNFPA 1993:6).

The overall feeling of Jetthul women that "there is nothing" locally to enable them to control their own fertility, is illustrated by the following extracts from informal taped discussions:

KM: ...have you ever done anything or taken anything ...like medicine to stop or wait a while before the next baby?
MT: ...no...how can we do this...there is nothing here...
KM: ...what about the Health Post?
MT: They have nothing...no medicine...they have nothing....
KM: Would you like to use something to decide when the next baby comes?
MT: We must go to Kathmandu.
KM: Would you like to use something to decide when the next baby comes?
MT: ...it is very difficult to get food for many children...I want to make a good life for my son...

(Mina Tamang aged 24)

KM: ...and have you ever taken any medicine, injection, operation or done anything to delay having a baby or to stop having a baby at any time?
ST: ...(laughs) ...what is there to do? We are poor people and no one helps us! ...No one gives us medicine to make us strong!
KM: If you were young now, would you want to have medicine to decide when the next baby comes?
ST: Yes, I want that medicine.

(Soma Tamang, aged 47 married with 4 children and 5 grandchildren).

Closer examination of biological and social aspects of fertility in Jetthul illustrates the special contraceptive requirements of women.

8.5 Fertility

Quantitative surveying, including quarterly updating of the community census, together with detailed fertility data gathering during the formal survey, yielded a rich data base from which to examine the fertility of the Jetthul community. As all children in Jetthul were born within marriage, it was possible to calculate the fertility of married women. From data collected concerning births, it was determined that the total number of live children born to the 54 women who had ever been married was 159, which produces a mean of 2.94 births. Six of the 54 ever-married women, representing 11% of the sample, were childless at the time of the formal survey. Four were in their first year of marriage, and are therefore regarded to be potentially fertile, but not to have experienced adequate exposure to the risk of conception

within marriage. The two women I mentioned in section 8.3 as asking me to help them become pregnant had failed to conceive after nine years and 18 years of marriage, suggesting fertility problems.

age cohort	mean no. of children ever born	range	number of women
15 - 19	0.3	0 - 1	3
20 - 24	1.1	0 - 2	9
25 - 29	1.5	0 - 2	8
30 - 34	4.0	3 - 6	5
35 - 39	3.8	0 - 9	14
40 - 44	4.0	1 - 7	12
45 - 49	4.7	3 - 6	3

Table 8.1: Trends in fertility by five-year age groups of married women.

Data set out in table 8.1 illustrate the pattern of births by five-year age cohorts. This shows that among married women under 20 years of age, parity is very low, with a mean of 0.3 children. It also illustrates that the increase in the number of children born is gradual throughout women's twenties, with childbearing increasing in their thirties.

Of the 48 women who had ever given birth, there were nine infant mortalities, experienced by six mothers. Among women married prior to completion of the road, three women each suffered two children die within the year of their birth and two women each experienced one infant death. Only one woman lost a single child within a year of birth in the cohort of women married after construction of the road. The small number of infant deaths, together with the different reproductive spans of the two groups of women, precludes valid statistical comparison of infant mortalities between cohorts. For the sample as a whole, out of the total of 159 live births, the nine deaths within the first year of life is equivalent to an infant mortality rate (IMR) of 5.7% or 57 per 1,000 live births.

Figure 8.1 illustrates the number of living children of each of the 54 ever-married women in Jetthul, which ranges from 0 to 9 children, with a mean of 2.8. It can be seen that just over half these women, 52%, have no more than two living children, 71% have three or less, 80% four or less and only 20% of women have more than four living children.

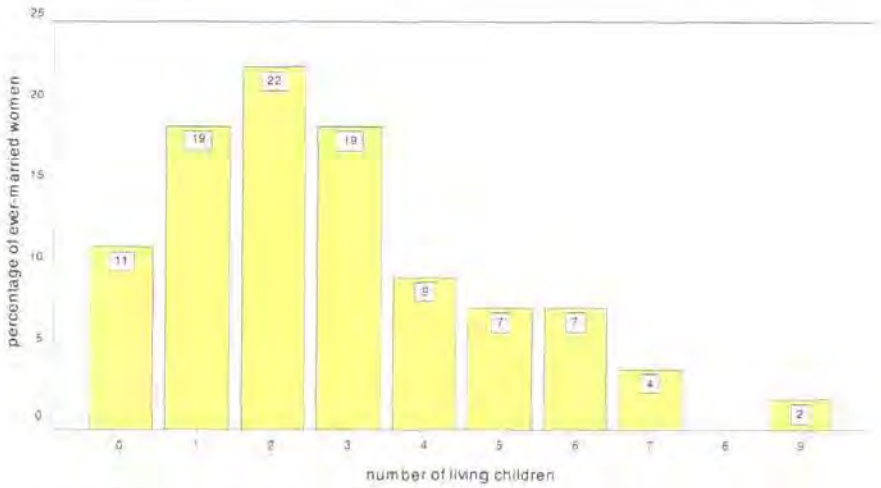

Figure 8.1: Number of living children of ever-married women

Mean values for the number of births to women aged over 45 (after Fricke 1985:38), indicate an average completed fertility of 4.7 children in Jetthul. The fertility rate in Jetthul is particularly low when compared with other natural fertility communities. Hutterite women, for example, bear an average of 9.5 children (Leridon 1977:107), which is more than double the fertility of women in Jetthul. Similarly low completed fertility rates, however, have been reported among Tamang of rural Nuwakot (Panter-Brick 1987:24), and the Tibeto-Burman Baragoanle of Kagbeni (Schuler 1981:91). Indeed, research has shown marital fertility in Nepal to be generally lower among Tibeto-Burman communities than Indo-Aryan (Karki 1998:178), even where they share the same village location (Panter-Brick 1987:24).


Plate 8.3: A mother with her children

Apart from social and cultural factors, there are many biological aspects of Tamang life in Jetthul that may contribute to the community's relatively low fertility, which may be expected to temper the demand for contraception. Seasonal variation in nutrition and high energy expenditure inherent in Tamang agricultural production results in suppressed ovarian function and anovulation (Panter-Brick, Lotstein & Ellison 1993:688). Fetal loss and sexually transmitted infections, all undoubtedly impinge upon the community's fertility, although no quantitative data are available to determine this. Infant mortality *per se* does not appear to be a substantial cause of Jetthul's lower fertility in

relation to that of Tamang communities. At 57 per 1,000 live births, the IMR of Jetthul is in fact lower than that that of off-road Timling, estimated to be approximately 20% of all live births (Fricke 1988:3). Indeed, it is markedly below the national rate of 97 per 1,000 (CBS 1995:106).

8.6 Timing of marriage and first birth

As marriage among women in Nepal is reported to be almost universal (Tuladhar 1989:7) and the vast majority of births occur within marriage, age at marriage is important in initiating the beginning of female reproductive potential and the length of a couple's marital fertility (Aryal 1998:87). Both female age at marriage and first birth provide an index of the beginning and duration of reproductive potential (Trussell & Reinis 1989:127), which is significant in determining social and economic change relating to reproductive behaviour and fertility. All of the children of women in Jetthul are born within wedlock, as is usual among Tamang communities (Axinn 1992a: 509), therefore, the timing of the onset of fertility within marriage is important within this setting. Female age at marriage has strong demographic associations (Acharaya 1998:99) as it affects a woman's reproductive span, which is an especially salient aspect of fertility in non-contracepting communities such as Jetthul.

8.6.1 Age of women at first marriage

Although girls are regarded to be adequately mature to marry following menarche and completion of their first 12-year cycle or *lhokhor*, survey data reveal marital age to be generally higher than the age of 12. The youngest age at which any of the women married was 13, and the oldest was 25 years, with a mean age at marriage of 18.8 years (s.d. 2.61). This is slightly higher than the mean of 18.1 years for the wider district of Sindhupalchowk, but high compared with many of Nepal's high caste Hindu groups (CBS 1995:184). Bahun women, for example, have a mean age at marriage of just 13.5 years (Tuladhar 1985:58). The Tamang and other Tibeto-Burman groups tend to exhibit markedly higher female age at marriage than Indo-Aryan groups of Nepal (Dahal & Fricke 1998:62; CBS 1995:183; Tuladhar 1993:181; Acharaya & Bennett 1981:68), which is related to cultural differences in regard to female virginity. Among Indo-Aryan peoples, *kanya daan*, the "giving of a virgin" at marriage is of the utmost importance both to the groom's family as it ensures paternity and ritual cleanliness, and to girls' parents as it affects their spiritual merit. As such, many girls are married early to reduce the risk of sexual contact and often before puberty as "proof" of purity (Niraula 1994:90; Tuladhar 1985:59). While virginity is a powerful motivator of early marriage of Bahun women, is not an issue in more sexually permissive Tamang society (Dahal 1996:152;

Fricke & Teachman 1993:178). In Jetthul, in common with other hill peoples, socio-economic concerns considered in chapter 7 tend to act as stronger determinants of female marital age (Dahal & Fricke 1993:319; Tuladhar 1985:59). For many agrarian communities, reliant upon family-based production, the relinquishing of a daughter's labour contribution at marriage is an important consideration in parental motivation to delay marriage (Niraula 1994:96; Folmar 1992:236).

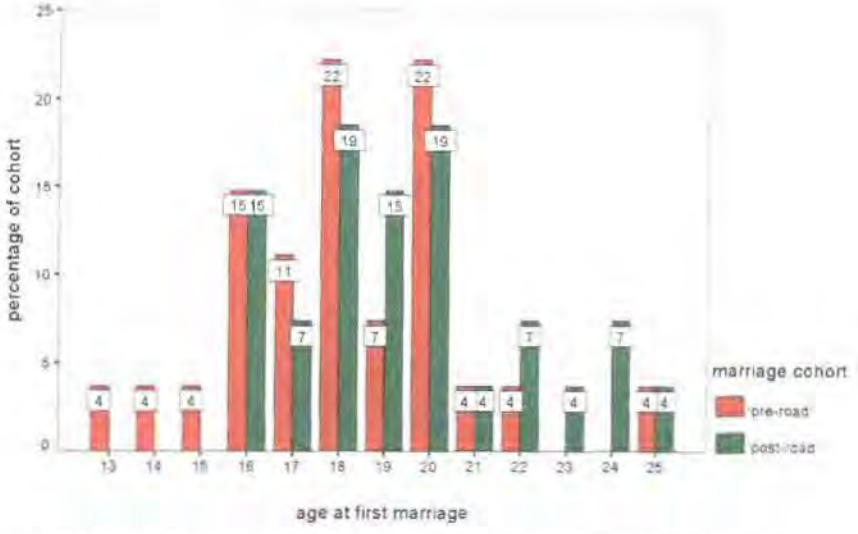

Figure 8.2: Age of women at first marriage according to marriage cohort

Comparing age at marriage of the 'pre-' and 'post-road' marriage cohorts,[1] figure 8.2 indicates a shift away from early teenage marriage among women who married after construction of the Lamosangu-Jiri road. Testing the influence of the road on age at marriage, using a t-test for independent samples, failed to reach significance at the 5% confidence level. Simple comparison of the two cohorts, however, illustrates that 16% of women married before completion of the road were between 13 and 15 years of age at the time, while none of the women married after road construction were married before the age of 16.[2] While the upper age at marriage is common to both cohorts, the lower end of the range is three years higher among women who married after the road was constructed. Regarding the upper end of the range of age at marriage, figure 8.2 shows that while only 12% of the 'pre-road' marriage cohort were 21 years or older, 26% of the 'post-road' marriage cohort were 21 or older at the time of marriage. Among women married after road provision, the mean age of marriage of 19.4 (s.d. 2.58) is over a year older than that of 18.2 years (s.d. 2.54) of their counterparts who

[1] The composition of these marriage cohorts is set out in chapter 7, table 7.1.

[2] The 1963 *Naya Muluki Ain* ("New Law of the Land") made provision for a minimum legal age of marriage of 16 years (Risal & Shrestha 1989:30). Since this time, even consensual sex with girls under the age of 16 is illegal and regarded as rape (UNICEF 1992:104). Although legislation is particularly difficult to enforce in Nepal, the national female mean age at marriage has risen from 15.1 years in 1961 (CBS 1987:247) to 18.1 in 1991 (CBS 1995:76), although it is unlikely that this increase is due to legislation alone (Risal & Shrestha 1989:39).

married before this time. The significance of this shift in marital age in relation to road provision is considered in the light of comparative data later in section 8.8.3.

8.6.2 Age of women at the birth of their first child

Like age at marriage, age at first birth is of demographic importance as it marks the beginning of a woman's fertility (Bumpass *et al.* 1978:75). All the 48 women that had ever given birth in their lives, delivered their first child between the ages of 17 and 33 years. The wide range in age at first birth suggests variation in behaviour relating to fertility and may reflect a level of sub-fecundity also indicated by the two women who failed to conceive throughout many years of marriage. Mean maternal age at first birth is 22.9 years (s.d. 3.46), indicating that Jetthul women deliver their first child later than the national average. By the age of 19 just under 15% of Jetthul women have become mothers, compared to 75% nationally (Acharaya 1998:106).

Figure 8.3 illustrates age at first birth as a proportion of each marriage cohort. Women married prior to road provision delivered their first child between the ages of 17 and 33, with a cohort mean of 23.7 years (s.d. 3.75). Women married after construction of the road, however, were aged between 18 and 28 at the birth of their first child, with a mean of 21.9 years (s.d. 2.88). While women married since construction road delivered their first-born almost two years younger than those married before, statistical testing of the relationship between age at first birth and the advent of the road using a t-test for independent variables, failed to reach significance at the 5% confidence level.

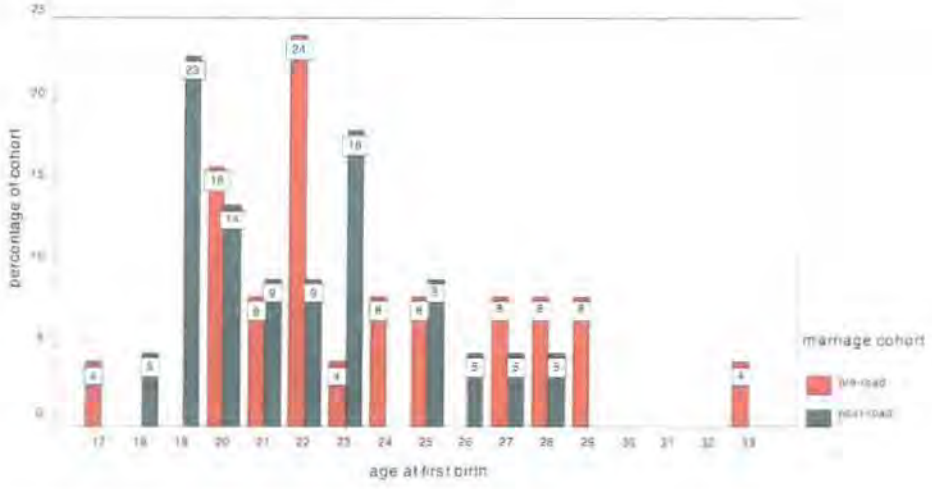

Figure 8.3: Age at first birth by marriage cohort

Data displayed in figure 8.3 show that at the age of 19 years, 28% of women married after road provision had given birth to their first child, compared with only 4% of those married before.

At the age of 20, only 20% of the 'pre-road' marriage cohort had delivered their first child, compared with 42% of the 'post-road' marriage cohort. While quantitative differences in age at marriage of such small sub-sample sizes may not be statistically significant, the differentials between the cohorts of women married before and after road provision suggest a tendency for women of the latter group to deliver their first born earlier, despite marrying later than the 'pre-road' cohort. Aspects of Tamang life in Jetthul that contribute to the changing patterns in age at first birth since road provision are considered in the context of the time lapse between marriage and first birth.

8.6.3 Post-marital birth latency

Some communities in Nepal observe a customary period of up to two years between marriage and spousal cohabitation (Folmar 1992: 235), and a delay of some four months has been noted among some Tamang (Fricke 1995:26; 1988:10). In Jetthul, however, women customarily women go to live in their husband's households immediately after marriage and there is no formal latency between marriage and cohabitation. The majority of Jetthul newly-weds spend at least the early years of their marriage residing in the groom's parents' home. Recently married couples enjoy very little privacy while they live with the groom's extended family and brides often have to establish a sexual rapport with their husbands while sleeping in the company of unfamiliar in-laws. As I mentioned in section 2.3.2, all a household's occupants, including the groom's parents and grandparents, his unmarried sisters (and visiting married sisters), brothers, their wives and children, and any temporary visitors, sleep together in the shared space around the hearth. The following extracts from tape recorded narrative illustrate this characteristic pattern of residency following marriage:

KM: How old were you when you were first married?
GT: I was 15 when I married.
KM: And did you live with your husband straight away after you married or did you stay at your parents' house before you lived with your husband?
GT: ...it was that day...
KM: ...you went to live with your husband the same day you married?
GT: It was the same day.

(Ganga Tamang, aged 41)

KM: When you married, was it some time before you went to live in your husband's house or did you go straight away?
LT: Straight away.
KM: Who lived in your husband's house with you?
LT: My husband lived in the house and his father and mother.

(Lawang Tamang, aged 19)

To gain an impression of changes in the behavioural dynamics between newly married couples

relating to fertility, I calculated the latent period between marriage and first birth and compared the two marriage cohorts. Figure 8.4 shows that all first births took place within one and 16 years of marriage and that the timing of first births of the 'post-road' marriage cohort are clustered more towards the early years of marriage than those of the 'pre-road' marriage cohort. Of women who married after construction of the road, 38% gave birth within the first year of marriage and by the end of the second year of marriage 67% had become mothers. Only 13% of women married prior to construction of the road delivered their first child within the first year of marriage and only 21% had given birth by the end of their second year of marriage.

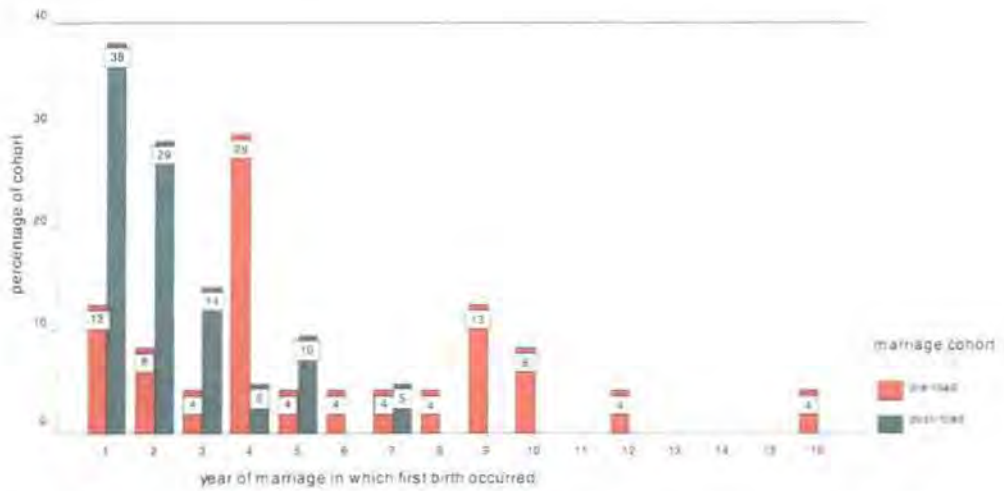

Figure 8.4: Year of marriage in which first child was born, according to marriage cohort

The mean time lapse between marriage and first birth is 4.2 years (s.d. 3.47) for the 48 women who had ever given birth. That the majority of marriages in Jetthul were shown in chapter 7 to result from parental decision-making, rather than mutual attraction, may discourage some brides from sexual co-operation in the early years of marriage. As families occupy the same sleeping space, embarrassment, insecurity and lack of experience in negotiating sexual behaviour in this public setting, contribute to young women's reluctance to engage in sexual intimacy. These factors, combined with economically necessitated frequent separation described in chapter 4, impede frequent sexual intercourse, which contribute to a time lapse of several years between marriage and first birth in spite of non-contraception.

Comparing the two marriage cohorts, the mean latent period between marriage and first birth is 5.79 years (s.d. 3.87) among women married before road provision and 2.38 years (s.d.1.66) among those married after, which is a difference of 3.41 years between the two cohort means. Analysis of these data using the independent t-test indicates a significant difference in the

period between marriage and first birth between the two cohorts at the 1% confidence level. It is unlikely that the decrease in the period between marriage and birth is a result of increased co-residence, as there is no evidence that young couples spend less time separated in recent years. To the contrary, young men married since the advent of the road are equally, if not more likely than their older counterparts married before road provision, to be separated from their wives in the early years of marriage by migratory wage labour and tending cattle away from the village in *goths*. As I set out in chapter 2, married women in Jetthul also absent themselves from the marital household from time to time, to stay in their *maiti ghar* (natal households). The frequency and duration of these visits are highly variable within and between communities, but can amount to considerable periods of spousal separation (Acharaya & Bennett 1981:78-79). The statistically significant reduction in post-marital birth latency by 3.4 years between women married prior to road provision and those married after, indicates a shift in intimate behaviour relating to fertility in the non-contracepting Jetthul community. Given that road provision has encouraged young men (and as I showed in chapter 5, increasingly young women) to spend extended periods of time in Kathmandu, it is plausible that exposure to urban and foreign lifestyles and mass media may have influenced changes in beliefs, desires and behaviours leading to earlier and more frequent sexual intimacy. This would explain behavioural changes resulting in the significantly reduced time lapse before the first birth of marriage among couples married after road provision. Indeed, Caldwell *et al.* comment that urban experience has a profound effect on the sexual behaviour of rural south Indian youth:

> To some extent a sexual revolution is taking place, blamed mostly on the cinema, with town ways and educated attitudes also mentioned. This tends to strengthen the bond between the young husband and his wife... (1988:57)
>
> Some parents also... feel their sons are becoming sexually restless - often alleged to be caused by new social influences, especially the cinema... (1988:98)

Indeed, changes influencing increasing coital frequency are arguably among the most potent factors affecting the time lapse between marriage and first birth in Tamang society (Fricke & Teachman 1993:185).

In addition to changes in intimate behaviour and spousal separation that impinge upon the timing of first birth and the spacing of subsequent conceptions within marriage, social change relating to breast-feeding practices also act biologically upon fertility and therefore influence requirements for family planning in Jetthul.

8.7 Breast-feeding

In Jetthul all women breast-feed their infants. There is no evidence of changing patterns of infant feeding or the use of breast milk substitutes, manufactured or home-made, as a primary source of nutrition for infants since road provision. While concern over producing insufficient quantities of milk for children's needs is a common topic of female conversation, women tend not to feed infants with breast milk substitutes. Fortunately, the growing trend of adopting inappropriate bottle-feeding in other urban and rural areas of Nepal (Molesworth-Storer & Costello1992) is not apparent in Jetthul. Semi-solid foods are introduced into the diet of all infants by six months, as this period is marked by the observance of *pasni*, the ritual offering of rice to infants at this age. Women continue to breast-feed their infants beyond the introduction of solid foods, until their subsequent pregnancy. The majority of children are nursed for two to three years, with some taking breast milk beyond the age of four.

Plate 8.4: A mother breast-feeding her infant

When mothers return to agricultural work following their confinement, they manage breast-feeding and care of their new-born infants either by taking them to the fields in a basket or leaving them at home in the care of an elderly female relative or siblings. As extracts from my field notes presented in section 4.5 illustrate, infants left with carers are generally taken to their mothers, usually by siblings, to be fed throughout the day. Although infants are suckled on demand, this only effectively occurs when mother and child are in close proximity, which is highly variable according to agricultural tasks being undertaken and individual child care strategies.

Although women do not intentionally use breast-feeding to reduce their fecundity, traditional methods of infant feeding, incorporating protracted demand breast-feeding, are expected to exert a marked dampening effect upon the fertility potential of women in Jetthul. Research has shown that lactating Tamang mothers, breast-feeding their infants on demand, experience extended amenorrhoea and suppressed ovarian activity (Stallings *et al.* 1996:24-25). Bongaarts estimates that lactational infecundability resulting from prolonged demand breast-

feeding, effectively reduces the fertility of non-contracepting populations by half (1978:116). Social and economic development are often associated with declining breast-feeding, which is in turn linked to decreased birth-spacing, higher overall fertility and detrimental effects on infant health (Habicht, DaVanzo & Butz 1986). While there is evidence of declining breast-feeding in urban areas of Nepal (Tuladhar 1992:315), artificial forms of infant feeding have not diffused to Jetthul since the opening of the road and women continue to suckle their children for several years. This aspect of female behaviour is expected to exert a strong fertility-limiting effect within the community and contribute to the comparatively low (for a natural fertility population) mean completed family size.

8.8 Comparison with the Tamang Family Research Project

Data concerning the more direct determinants of fertility from the TFRP are presented in varying formats in the literature. For this reason, data are not highly comparable and comparisons are patchy. TFRP marriage and fertility data are presented by Fricke and others by cohorts defined according to whether marriage occurred before or after 1960. While this year is of no particular salience to road provision within, or in the area of these communities, it does provide an indication of change over time. For the off-road rural community of Timling, 1960 marks a shift in economic activity from Tibet, with the closure of the border following Chinese invasion of the country. After this time there has been increasing mobility and participation in waged labour outside Timling (Fricke 1995:28).

8.8.1 Use of contraception

In common with the Jetthul community, early data on family planning use among the off-road Timling community reveal a complete absence of contraception in 1981 (Dahal & Fricke 1998:65). By 1987, however, the first use of fertility limitation was evident, when five men reported undergoing vasectomies (Dahal & Fricke 1998:66), which represents approximately 2% of the male population between the ages of 10 and 64 at that time.[5] This may reflect the influence of the road two days walk from Timling that was constructed in the mid-1980s, in improving access of mobile sterilisation units to the community. In the on-road peri-urban setting of Sangila, contraceptive prevalence among ever married women under 65 years old was 17% (Dahal & Fricke 1998:64). The higher use of contraception in Sangila reflects the community's closer proximity to urban influences and trends of social change. Disparity between the peri-urban and rural communities of the TFRP reflects wider patterns of contraception that have become evident throughout Nepal in recent years (NFHS 1996:9). The

[5] This was calculated using 1987 population statistics for Timling presented in Fricke *et al.* (1991:33.)

situation regarding the adoption of family planning among the Tamang of Jetthul, however, shows that contraceptive use is not simply determined by physical accessibility, but remains mediated by the dynamics of ecological, economic, social and biological concerns.

8.8.2 Fertility

The persistence of non-contraception in Jetthul becomes clearer when considered in the light of fertility of the community, especially when placed in the wider Tamang and national context.

		age group			
		<25	25 - 34	35 - 44	45 - 54
Jetthul	(near-road)	0.9	2.5	3.9	4.7
Timling	(off-road)	1.5	3.0	5.5	5.3
Sangila	(on-road)	1.1	3.4	5.0	6.1

Table 8.2: Age trends in the number of births in Jetthul and the two TFRP communities.

Data set out in table 8.2 illustrate the mean number of births for women by 10-year age cohorts in Jetthul and the two TFRP communities. The most noticeable feature of these combined data is that the mean number of children ever born to women in Jetthul is consistently lower than in the TFRP communities across all four age groups.

In the youngest group of women, those under 25, the mean number of births among Jetthul women is 0.6 lower than in off-road rural Timling and 0.2 births lower than in on-road peri-urban Sangila. Among women of the oldest age group, 45 - 54 years, the mean number of births to Jetthul women is 0.6 lower than in Timling, and 1.4 births fewer than in Sangila.

Taking mean values for the number of births for women aged 45 - 54 as indicative of completed fertility (Fricke 1985:38), Jetthul has a mean completed fertility of 4.7, compared with 5.3 in off-road rural Timling, and 6.1 in on-road peri-urban Sangila. The nature of subsistence agro-pastoralism and increasing male economic migration from rural Tamang communities means that married couples are parted for substantial periods throughout the year, as men tend cattle in the *goths* and reside away from home during periods of wage labour (Campbell 1993:55; Fricke & Teachman 1993:180). Economically necessitated separation is expected to reduce coital frequency within marriage and the probability of conception. This is apparent in the lower fertility exhibited by both rural communities of Jetthul and off-road Timling, compared

[6] These data were calculated from tables in Fricke (1993:87-88.)
[7] Source: Dahal & Fricke (1998:64.)

with on-road peri-urban Sangila. Decreased reliance on pastoralism and the availability of wage labour within the peri-urban village arguably results in lower marital separation, which is reflected in Sangila's higher fertility (Fricke, Thornton & Dahal 1990:288, 291) and consequentially greater use of contraception. Married women's visits to their natal homes also adds to spousal separation throughout the year. Within the marital household, the frequency of coitus, a major determinant of fertility in non-contracepting communities (Rindfuss & Morgan 1983), may therefore be reduced by both economic and social aspects of Tamang married life.

Research into adoption of family planning among the TFRP communities (Dahal & Fricke 1998:71) and nationally (Risal & Shrestha 1989:32), suggests that parents tend to contracept only after achieving a family of four children. Furthermore, Tuladhar suggests that the persistence of high fertility in Nepal is, in part, due to lack of demand for family planning (1993:177). As fewer couples in Jetthul have four or more living children, and completed family size is smaller than in the TFRP communities, the continued non-adoption of contraception since access to services improved with the opening of the road, is more clearly understood, especially as the most commonly available free contraceptive service is, in fact, sterilisation.

8.8.3 Timing of marriage and first birth

The increasing age at marriage observed among women in Jetthul is also apparent in off-road Timling, the only TFRP community for which marital and first birth data are available. Female age at marriage ranges from 11 to 25 years of age (Dahal & Fricke 1993:311) and the shift to higher age at marriage over time is almost identical to that in Jetthul. The mean age at marriage of Timling women married before 1960 is 18.3 years, and 19.4 years for women married after this time (Fricke 1995:Table 2). Mean age at marriage in the Timling pre-1960 cohort, is just 0.1 year higher than that of the Jetthul 'pre-road' cohort and the most recent marriage cohorts of the two communities exhibit identical means. This not only reflects the similar social, cultural and economic concerns of the two communities, but also the trend exhibited by the wider population of Nepal. The 1991 census shows that nationally, mean female age at marriage has increased by 0.8 years in rural areas and 1.1 years in urban locations. This trend of increasing age at marriage has been ongoing for the last two decades (Acharaya 1998:98; CBS 1995:76,196), during which time the gap has narrowed between the higher age at marriage in urban areas and the lower age among rural populations (CBS 1995:183; Tuladhar 1993:181). As the road within two days walk of Timling was not constructed until the mid-1980s, these data suggest that the rise in female marital age apparent in Timling and Jetthul

may be part of the county-wide trend, rather than a more direct influence of road provision.

Comparing mean maternal age at first birth of 22.9 in Jetthul with that of 22.5 in Timling (Fricke 1995: Table 1), it is apparent that the two communities present similar overall means. These are also consistent with the mean of 23 years for Tamang women of rural Nuwakot reported by Panter-Brick (1987:24). Comparison by cohorts, however, reveals opposing trends among off-road Timling women and those of near-road Jetthul. In Timling, the mean age at first birth has increased over time from 21.5 years among women married before 1960, to 22.2 among those married after (Fricke 1995: Table 3). Conversely, in Jetthul, age at first birth has decreased over time from 23.7 years among women married prior to construction of the road, to 21.9 years among those married after.

In off-road Timling, maternal age at first birth reflects the pattern of increasing age at marriage. However, in Jetthul, while mean age at marriage has also increased, since the advent of the road, mean age at first birth has decreased. This is a result of the significant and marked decrease in the time lapse between marriage and first birth revealed in section 8.6.3. Comparison of these longitudinal data further support the suggestion that broadening experience of Jetthul youth since road provision has influenced changes in intimacy and reproductive behaviour.

8.9 Discussion

At the beginning of this chapter I referred to certain objectives of the LJRP (Basler & Hofman 1975:11), which set out the intention that the road should improve the access of local communities to bio-medical health services and increase the use of family planning. Studies of development trends within the LJRP area conclude that while motorised transport enabled by the road has led to an overall increase in the use of modern regional health outlets and the adoption of contraception, these trends vary between communities (INFRAS 1991a:110; Sacherer 1990:42-43). During the course of this chapter it has become clear that among the Tamang of Jetthul there has been neither growth in the use of the local Health Post, nor adoption of contraception, in spite of women expressing an imperative for both services.

Why then, following potentially improved accessibility provided by motorised transport, do women not use local and regional health facilities, and why do they not benefit from mobile family planning and health services? The answer lies in the particular social and economic circumstances of the Jetthul community. Since road provision, there has been no subsequent

increase in the density of services in the Jetthul area, which bears out Richards' (1984:15) comments that following road construction, poor communities in rural areas of LICs are the least likely to be provisioned with additional health facilities. In terms of physical mobility to existing services, actual access to more local bio-medical services is determined by the affordability of transport and health service costs. This is why Jetthul women who had approached the Health Post, like poor rural women of other LICs following road provision (Airey 1991:277; Stock 1983:563), did so on foot, rather than by motorised vehicle.

Lack of use of local health outlets is compounded by the inadequate funding, unreliability and poor quality of service at the Health Post and the Jiri Hospital. As a result of these failings, potential Tamang female clients regard these service centres as not having the capacity to meet their health and reproductive needs, and the Health Post in particular remains underutilised. Other factors contributing to women not using the road to access local health services concern the manner in which health workers relate to the social and educational status of the Tamang. As I discussed in sections 2.4.2 and 2.4.3, the majority of higher *jats*, to which most educated individuals who subsequently enter government service belong, regard themselves as superior to alcohol and beef consuming peoples. The Tamang themselves do not subscribe to this frame of reference, and the anger and resentment generated by the all too common dismissive attitude of government officers, compounded by their own lack of education, leads Jetthul people to avoid interaction with officials. These factors undermine the ability of local outlets to effectively provide primary health care and appropriate contraceptive services. The situation in Jetthul reflects certain elements that commonly contribute to ineffective health service delivery in rural areas of LICs that persist following road provision (Airey 1991:287).

Some of the chronic concerns over health provision are magnified in circumstances of medical emergency. As the case of Bhim and Pema Tamang illustrates, even in potentially life threatening situations, the economic implications of accessing more reliable medical assistance in Kathmandu have to be carefully considered, and the decision to seek medical assistance is mediated by financial resources. Consequentially, very few Jetthul people benefit from the shrinkage in distance between their community and urban hospitals that road provision has brought about. This situation is not uncommon elsewhere in Nepal. It has been noted by Shrestha (1998:6), that even following road construction, only 2% of villagers in Dhading District use road transport to access health services in Kathmandu.

While road provision has potentially improved accessibility for mobile reproductive and health

outreach services, their lack of use and efficacy indicates their failure to meet the needs of Tamang women in Jetthul. Government and multi-laterally aided FP/MCH and Community Health Services, that aim to deliver services at the grass-roots level through Village Health Workers (VHW) and Auxiliary Nurse Midwives (ANM) have succeeded neither in delivering primary health nor reproductive care in Jetthul. While training and resourcing of outreach workers may, in part, contribute to this, circumstances particular to the Jetthul community also contribute to the lack of regular visits and poor level of local health care delivery. Because Jetthul is situated almost two hour's walk from the road along a steep and poorly maintained track that is not easily accessed during the monsoon, VHWs and ANMs are reluctant to make the off-road journey to Samche and Turana. It was clear during the one VHW's visit of my fieldwork, that chronic communication problems attached to disparities in *jat* and education, also apparent in the community's dealings with the Health Post worker and agricultural extension officer reported in chapter 4, act to obstruct service health and contraceptive delivery in Jetthul. This may account in part for Sacherer's findings (1990:42-43) that trends in use of modern health and contraceptive services facilitated by the Lamosangu-Jiri road vary by *jat*. The resulting absence of dialogue regarding contraceptive needs through this channel and lack of village-based maternal and child health services have led to a failure to address maternal, infant and child mortality and reproductive health care. Although infant mortality is not particularly severe in Jetthul compared with other rural areas of Nepal, the deficiency of accessible health services maintains concerns regarding child survival that impact strongly upon parents' perceived need for family planning. Nepal exhibits one of the world's highest under-five mortality rates in the world (UNICEF 1991:102), and under such conditions, couples tend towards higher fertility (Cleland 1998:207; Retherford 1985:258).

A further factor contributing to the apparent paradox of unmet female demand for contraception following increased access to services, concerns contraceptive policy and delivery in Nepal. The national family planning programme has, for the majority of its duration, centred efforts on the provision of permanent fertility termination with the use of mobile sterilisation camps (Glennon & Fegan 1993:612; Tuladhar 1993:178), rather than on birth spacing and the provision of temporary methods. Consequentially sterilisation has become the most widely known, locally available and adopted form of fertility limitation in Nepal (NFHS 1996:7; CBS 1995:457; Thapa & Pandey 1994). As chapter 4 revealed, however, road construction has not led to substantial improvements in production or income to bring about a shift in the economic value of children. As wealth continues to flow from offspring to parents and family-generated labour requirements have risen with male migration, the strategic

requirement for surviving children (particularly boys) persists. The concentration of government family planning policy upon fertility termination has, therefore, led to a situation whereby the only locally available free 'contraceptive' that has succeeded in reaching Jetthul via the road is sterilisation offered by mobile units. Research has shown, however, that the majority of Nepalese (Risal & Shrestha 1989:32) and Tamang (Dahal & Fricke 1998:71) parents do not contracept until they have four children, and that among Asian communities, sterilisation is only considered acceptable with the surety of survival of at least two sons (Ramachandran 2000:3). In poor agrarian communities such as Jetthul, the necessity for reproduction of labour through childbirth and the uncertainty of child survival renders sterilisation contrary to the needs of couples who have not established a secure complement of children.

In this chapter I have shown that since road provision, traditional fertility-reducing behaviours indicated by Bongaarts' model of the proximate determinants of fertility have been maintained in the study community. Jetthul women not only marry later than many Nepalese women, but childbearing is spread throughout their reproductive years. This is due to combined biological and cultural factors determining exposure to conception including prolonged demand breast-feeding and spousal separation. Fertility is consequentially relatively low for a natural fertility population (and indeed for a Tamang community, as comparison with the TFRP showed) and many women do not achieve an economically desirable family size until towards the end of their reproductive span. Given the constellation of factors surrounding reliance upon the labour of offspring, fertility patterns and that there have not been improvements in grass-roots level health services to alleviate child survival concerns, sterilisation remains unacceptable to the majority of Jetthul parents. Furthermore, there is lack of information disseminated to enable informed election of sterilisation among older women (and indeed men), for whom the procedure might be appropriate and desirable. The lack of understanding of vasectomy and tubal ligation among poorly educated Jetthul people is compensated for by rumour and myths. The fear of side effects of these surgical procedures is common among the rural poor in Asia (Ramachandran 2000:3) and is closely linked to the avoidance of sterilisation among Nepal's most disadvantaged communities (Gonzalez 1990:10). Overall, however, it is the lack of locally available temporary forms of contraception that is associated with a lack of contraceptive use (Ramachandran 2000:3). Indeed, Caldwell considers whether Nepalese fertility decline might not have been more marked, had family planning policy not been so reliant upon sterilisation, given that fertility decline in Bangladesh increased following the introduction of temporary methods (1998a:7). In a situation of chronically high child

mortality, parental confidence in the survival of children remains cautious, even when development efforts result in improving health and child mortality indices (Sathar & Casterline 1998:786; Schuler & Goldstein 1985:5).

Social and cultural supports of pronatalism remain strong in Jetthul, as has been reported in other areas of Nepal following road provision (Shrestha 1998:18). Although terminal contraception may be contrary to the needs of men and the majority of women in Jetthul, perceptions of fertility regulation are sharply defined by gender. Men view children as positive assets to the household labour force and its future economic security. While women share this view, for those of reproductive age, each pregnancy and delivery represents not only pain and further childcare responsibilities to add to their work burden, but in the absence of peri-natal services, presents a threat of death. While the majority of men do not perceive a need for family planning, women of all reproductive ages voice a strongly felt necessity for methods by which they might temporarily control their fecundity. It was in the area of health and reproductive care that women expressed negative feelings about the LJRP. Women's expectations of improvements in local services had been raised by road provision, but they remain bitterly disaffected by the lack of tangible developments and continue to feel that contraception and health care are being withheld from them.

The lack of fertility regulation in Jetthul is closely bound to gender power relations. Condoms, the most locally available temporary contraceptive, remain unadopted both due to men's lack of approval and co-operation, and because of the difficulties of discrete use in shared sleeping space. Many women directly requested contraception which they intended to use without their husbands' knowledge, but are hampered in so doing by of the lack of locally available, temporary female methods. Throughout chapters 4 and 5 a situation emerged of widely differing patterns of male and female mobility and urban experience. While the majority of men live and work in urban areas for temporary periods during the year, women remain bound to the village by their production and childcare responsibilities. Even though there is evidence of increasing female travel since road provision, only a third of women visit a city during the year, where there is a wider availability of family planning methods (Karki 1998:180). Improvements in physical access, however, have not led women to realise their contraceptive requirements during city visits. This may be due in part, to their lack of information about contraceptive methods and knowledge of how and where to obtain them in the city. Differentials in the awareness of family planning methods and use of contraception among communities in the LJRP area are found to be closely linked to female literacy and

improvements in living standards (INFRAS 1991a:110), which are low in Jetthul. Although Tamang women in Jetthul enjoy a high degree of self-determination within the context of Nepalese gender relations, the balance of power usually favours the male perspective. Female education, an important determinant both of use of contraception and gender power balance in Nepalese marriage (Upreti 2000:2), was shown in chapter 6 to be low in Jetthul. Additionally, a high level of mobility is associated with improving female reproductive bargaining power within marriage (Ramachandran 2000:3), the low level (relative to men) of which may contribute to Jetthul women's inability to negotiate and gain appropriate contraceptive methods for their needs.

While the potential impact of road provision on improving physical access to health and contraceptive services has not been effectively met by service provision at the local level, there is evidence of changing sexual behaviour of young couples. The emerging pattern of a significant and marked decrease in the interval between marriage and first birth has implications for local population growth. While the earlier onset of marital fertility might potentially increase future demand for contraception, in the absence of accessible temporary methods and economic development initiatives leading to a reduction in poverty and reliance upon offspring, the fertility rate of Jetthul is likely to rise. As many of the circumstances in Jetthul are common in rural Nepalese communities, the situation has wider ramifications for national demographic objectives. This indicates reassessment of family planning policy and service delivery in rural areas. Changing patterns of sexual behaviour also have important consequences for the health of the Jetthul community. With the developing road network increasing the movement of people between rural and urban areas, and rising involvement of the Tamang (Schubert 1999:21; Newar 1998; Pradhan 1994:37) in commercial sex, there is a real risk of HIV spreading to the community (Malla 1997; Pande 1997). Intervention is clearly urgently needed to encourage male acceptance of condoms. In this way the potential of the Lamosangu-Jiri road as a transmission route of sexually transmitted infections might be reduced by mobilising use of this locally available, affordable, temporary contraceptive.

Chapter 9

Conclusions

In this final chapter of my thesis, I conclude with a discussion concerning ways in which construction of the Lamosangu-Jiri road has impacted upon the lives and reproductive behaviour of Tamang women living within the road corridor in Jetthul and consider the broader implications of these findings. Through the course of my research it has become apparent that road provision has had mixed repercussions upon female life and that a constellation of factors relating to the Tamang of Jetthul and wider Nepalese society combine to hamper the development potential of the road on the community, and women in particular.

The chronic poverty and geographical situation of Jetthul have been major determinants of ways in which the community has been able to take advantage of expanding economic opportunities presented by the road. Because Samche and Turana are not situated on-road, and as the Tamang do not have the financial resources to relocate there, a shift towards more commercial means of income generation has not been forthcoming. Economic niches created by the road, for example: in trading imported commodities, serving passing traffic with food, accommodation and fuel, and in supplying transport itself, have in the main, been exploited by those with adequate wealth or a more advantageous, on-road, location. Like the majority of disadvantaged, low *jat* communities in Nepal, the Tamang of Jetthul have not, in the long-term, been in a social or economic position to take advantage of opportunities presented by provision of the road (Hamill *et al.* 2000:93-94; Shrestha 1998:3; Caplan 1997; Nabarro *et al.* 1989:72). Indeed, there is evidence that the road has heralded new hardships, especially for women.

Many families, in coping with pressure on available land, production shortfalls and an increasing need for cash, have diversified largely through male engagement in seasonal and

extended wage labour outside the village. While road provision has improved and encouraged male access to employment further afield, the Tamang of Jetthul, like many poorly resourced rural Nepalese populations, have migrated in search of work for many years (Fricke *et al.* 1990:301; INFRAS 1990:108). The low social status of the Tamang in wider Nepalese society, however, narrows their range of job options and skill-base, and limits their earning capacity within the broader geographical field that road provision facilitates. This acts to maintain the impoverishment of the Jetthul community, in spite of men shifting both the nature and geographical sphere of their labour. The reduction in the household labour force, due to extended male absence, has intensified women's subsistence workloads.

My analyses have shown that the road's potential for travel is not realised by women to the same extent as men. As primary carers of children, women are more constrained in their mobility. This together with the unaffordability of motorised transport, prevents them from taking advantage of opportunities offered by transport improvements and developing their economic activities beyond village-based farming and petty produce trade. Because the road, in the absence of specific initiatives, has not stimulated sufficient local trade and industry to broaden waged labour and income-generating possibilities, women's work options remain concentrated in subsistence agriculture. This not only represents a missed opportunity to raise Tamang women from their poverty, but also acts to traditionalise their gender role and maintains the focus of their working lives within the family and village. In the long-term, this, together with a widening gap in access to resources, may act to weaken women's position in gender power relations (Fernando 1998:65; Leyland 1996:3). In a similar way, the customary lack of autonomy of young women in spouse choice is reinforced by the acute labour shortage and pivotal role of women in farm production, as a consequence of rising male migration since road provision. This, together with the immersion of women in subsistence production has important demographic ramifications. The traditionalising of female roles is associated with dependence upon the security provided by offspring (Niraula & Lawati 1998:168; Mellander & Jönsson 1993:15), and maintenance of high fertility (Acharaya 1995:151; Tuladhar 1993:176, Axinn 1992). Although the majority of rural Nepalese women work in farming and enter arranged marriages (Joekes 1991; Joshi 1985; Acharaya & Bennett 1981:43), road provision near Jetthul, by encouraging male migration and thereby exacerbating the manpower gap, has indirectly acted to reinforce customary patterns of female work and lack of autonomy in the marriage process.

Within subsistence production, the disadvantaged economic and social status of the Tamang

also mediates the extent to which the population - women especially - are able to take advantage of the road's potential to stimulate agricultural development and produce marketing. The lack of affordable farming inputs, ineffective agricultural extension services and a deficit of project intervention to assist women to viably trade farm produce at markets along the road, contribute to the under-realisation of the road's potential to expand income generation among women in this arena. In chapter 4, I quoted Blaikie *et al.*'s (1977:50) comments upon the impact of road provision upon access to farming inputs in rural Nepal in the 1970s: "... it was only the very advantaged peasant and the employers of labour who could avail themselves of these new road-based opportunities ..." Evidence from Jetthul, and other studies in Nepal (RAP 2000:15; Caplan 1997:623; JMA/IIDS 1995:24,51; Nabarro *et al.* 1989:71), reveal a persistence of inequalities in access to agricultural developments that road provision renders accessible to more advantaged farmers. Given the emphasis placed upon road construction in efforts to raise rural living standards through agricultural development and marketing in Nepal (Thapa *et al.* 1995:13-14), additional intervention is clearly needed to assist disadvantaged households, such as those in Jetthul, to more effectively exploit the road's economic potential (Seddon & Shrestha 1998:39-41; JMA/IIDS 1995:62,112).

Although this study has demonstrated that Jetthul women do not participate equally with men in the use of the road, it has shown that women have increased their experience of visits and residence in Kathmandu since completion of the road. Because the majority of female road journeys are for social reasons - to visit male relatives working in the city - travel to the capital is most frequent among married women, who visit their husbands. Although fewer pre-marital women travel by road, those who visit Kathmandu are able to do so more frequently and stay for longer periods, as they do not have children to care for and the domestic responsibilities of married women. An important aspect of behaviour during urban visits is that young women increasingly access mass media such as cinema and video (that are not available in the village) during their formative years. This has important implications for broadening women's worldview at an impressionable stage in their lives, and is linked with the diffusion of on-going social change (in particular, attitudes influencing fertility) from urban to rural areas, both in Nepal and other LICs (Aryal 1998:74; Caldwell 1998a:2; Niraula & Lawati 1998:170).

The gap in the labour force resulting from male migration has led to a growing need for all remaining household members from the elderly, to the very young, to increase their labour contributions. This particularly increases the need for children's labour in households' agricultural and domestic coping strategies and maintains the imperative for family labour

through childbirth, that in turn supports continued high fertility. Increasing dependence upon children's labour impedes their inclusion in the local school, and the Tamang's general poverty is also a major determinant of children not using improved transport along the Lamosangu-Jiri road to attend the secondary school in Thulopakhar. This is reported to be the case elsewhere in rural Nepal (Shrestha 1998:15; Nabarro &McConnell 1990:72), and in some other LICs (Grieco *et al.* 1996:162; Richards 1984:16), following road provision. Because the Tamang's impoverishment also drives the need to retrieve economic returns on all investments, and because girls do not contribute to their parents' household following marriage, there is less parental incentive towards educational investment in daughters, and Jetthul girls receive markedly less schooling than boys. The resulting low level of female literacy maintains the cycle of poor access to information and narrow employment options, which, together with the differential between male and female education, may compromise female self-esteem (Jejeebhoy 1995:69). This not only constrains a generation of women from participating in development, but by adding to the imbalance between men and women, further threatens gender power relations. Because female education is linked to improving child health indices and declining population growth, both in Nepal (Aryal 1998:89) and other LICs (Sen 1997:10; LeVine *et al.* 1994), the education situation of Jetthul women represents a failure to address issues at the heart of high fertility, namely concerns over health and child survival.

Within the broader national context, the continued lack of literacy among Jetthul women perpetuates the perception among wider Nepalese society of the low status and exploitabiliy of Tamang women, who are especially favoured in the commercial sex industry (Newar 1998; Pradhan 1994:35). Given the rising consumerism accompanying road construction, together with a lack of local female cash-earning options (ILO 1998:4; New Era 1998), and that vehicle stopping points along roads create a demand for commercial sex (Seddon 1998:40, Shtrii Shakti 1995:27), the near-road location of Jetthul renders women more accessible to local demand for prostitution, and more organised procurement and trafficking women for the national and international sex industry (Seddon 1998:40). Although a significant trend to commercial sex work was not found among Jetthul women in the course of this study, prostitution may well increase rapidly in the future, unless female employment options can be found beyond the unskilled, poorly remunerated occasional work currently available. Project intervention is clearly needed to improve female access to basic education and appropriate means of income generation, possibly including cottage industry.

Child health and maternal survival of childbirth remain prime concerns of Jetthul women. As

was made clear to me in unstructured interviews, women feel highly vulnerable and disappointed to the point of anger, that road construction has not heralded improved maternal and child health provision at the village level. An important point arising from this situation is an apparent paradox between women's desire for the security that children provide and their anxieties surrounding childbearing. While women, to a certain extent, share the prevailing male view of the economic necessity of children, the pain and mortal risk they undergo during delivery, discourages them from conceiving. Beyond facilitating maintenance of the Health Post, road construction has not markedly enhanced female access to bio-medical health care, or family planning services, that are generally poorly distributed and resourced in rural Nepal (Subedi *et al.* 2000:100; McIntosh 1993:7-1). Although Turana and Samche are, by local standards, within a reasonable distance of the Health Post, women can neither afford the cost of motorised travel, nor the time to walk there, especially since the services offered are insufficient to meet their needs. Health care delivery through local services is also hampered by the assumed social superiority of educated, higher *jat* health workers, which discourages Tamang women from seeking health care assistance and reproductive advice.

While government policy provides for village-level FP/MCH delivery through Village Health Workers and Auxiliary Nurse Midwives (Pathak 1990:43), these health personnel are noticeably absent from Jetthul, which appears to be, at least in part, due to the villages' location between one and two hours' walk off-road. Although road access has brought Jetthul within range of mobile sterilisation units, given patterns of fertility and the continued economic reliance upon offspring, it has become clear that the approach of contraceptive outreach services is inappropriate to the needs of the community. Not only has this contributed to a failure in the road's initial objectives (to increase the use of contraception: Basler & Hofman 1975:11) among the Jetthul population, but the indirect impact of traditionalising women's role and the lack of subsequent project interventions to include women in development, act to sustain the necessity for high fertility. This situation is further strengthened by the continued lack of confidence in child survival that is maintained by the lack of affordable access to efficient health services.

An important point to emerge from my research is a parallel in the fertility goals of Jetthul women (i.e: limiting family size through spacing births) and the demographic objectives of HMG and concerned family planning agencies (IPPF 1994:15; Glennon & Fegan 1993:612; PRB 1992). What sets apart potential Jetthul clients and providers is the method of achieving this aim. Clear guidelines have become apparent for the provision of contraception with the

potential both to meet the needs of women motivated to limit their fertility and concurrently address the very high annual growth rate of the Nepalese population (CBS 1995:2). Jetthul women require simple and discrete temporary female methods that are delivered through approachable, socially sensitive outreach services at the village level. There is also a need for a wider availability of family planning information for illiterate rural women, to empower them to assess the temporal efficacy, potential side-effects and risks, in order that they may make informed choice of contraceptive methods. Awareness-raising of surgical procedures that have been established in the predominating mobile camps is needed to de-mystify sterilisation and enable its use by women and men who might judge it to be appropriate and acceptable for their situation.

Certain aspects of change affecting women's lives and reproductive behaviour since road provision indicate an urgent need to provide for women's contraceptive requirements and for project intervention to encourage men to use condoms, not only for contraceptive purposes, but perhaps more importantly, to protect themselves and their partners from sexually transmitted infections. My analyses have shown that in Jetthul, road provision has not had the impact upon reproductive behaviour that was anticipated at the outset of the project (Basler & Hofman 1974:11). Rather than encouraging a reduction in the rate of population growth by encouraging use of contraception, fertility in Jetthul remains natural and unlimited. Nonetheless, there is evidence of social change since road provision, most probably due to the rise in urban contact and media exposure of young men and women, which has led to changes in intimate behaviour (Caldwell & Caldwell 1976:384). This has brought about a significant decrease in the time lapse between marriage and first birth that has implications for both the rate of population increase in Jetthul and also for the future health of the community. Considering that pressure on available land is a major factor driving the economic strategy of male migration and that women express the desire to limit their fertility, earlier onset of (and therefore extended) marital fertility is contrary both to women's wishes and the ecological carrying capacity of available land.

Of more immediate concern to near-road rural settlements such as Jetthul, is the risk of transmission of sexually transmitted infections (STIs), particularly of debilitating and life-threatening viruses such as Hepatitis B and HIV. With a high degree of marital separation and exposure to wider experience such as prostitution during the course of male migration, it is likely that sexually permissive Tamang men and women might engage more frequently in extra-marital sexual encounters, in some cases on a commercial basis. Studies by New Era

(1998) and Gurubacharya (1994) illustrate that the majority of Nepalese sex workers and their clients fail to use barriers that might reduce sexual disease transmission. Given that my research has shown that Tamang men and women do not use condoms, there are no indications of protective behaviours against STIs. At the village-level, with an increasing number of outsiders passing by, there is rising potential for lone women to have sexual contact outside marriage, or even enter into commercial arrangements. Road traffic, regarded to be instrumental in the rapid diffusion of STIs (and notably the HIV virus) in Nepal (Malla 1997; Pande 1997), contributes to the configuration of social and economic factors surrounding Jetthul, that places the community at risk. Given the poor level of local health services and marginal economic situation of the Tamang in Jetthul, the consequences of the introduction of infections such as HIV and Hepatitis B, would be catastrophic (Seddon 1998:36).

By focussing an integrated approach on women, this study has demonstrated that the road, while bringing some positive female developments, notably broadening experience through urban contact and media exposure, has not benefited women equally with men. While road transport serves male patterns of migratory labour, the majority of female transport and haulage for domestic and agricultural labour remains non-motorised, and the bulk of female transport needs are not met by the road. This indicates that the early impact of changes set in motion by road construction have exacerbated gender inequalities in mobility and sphere of action. The integrated approach taken by this study has demonstrated that from a female perspective, road provision has not heralded direct changes to markedly improve ways of life and reduce inequalities with urban areas. Furthermore, it highlights that, in assessing the efficacy and implications of development innovations in LICs, emphasis needs to be placed on the impact on all sections of the community. In contributing to the detailed, community-level understanding of the dynamics of the early effects of the Lamosangu-Jiri road on female life, this thesis has identified areas of development and family planning programming that require reappraisal. It also emphasises the need for greater inclusion of women and girls in project design and evaluation, to more effectively achieve development and demographic objectives.

The Lamosangu-Jiri road undoubtedly provides the infrastructure necessary to promote desirable social, economic and demographic change. My research, however, has underscored the reality for many disadvantaged people in LICs, that road construction in itself is insufficient to stimulate such development (Dawson & Barwell 1993:74). Moreover, it highlights that opportunities offered by road provision in Nepal can only be taken up by those in a social and economic position to do. For populations such as the Tamang of Jetthul, low

jat status (especially as consumers of beef and alcohol), poor education and literacy skills, poverty and location some distance from the road, mediate access to means of improving their economic security, health and quality of life. Furthermore, this study emphasises that rural women tend to encounter more adverse effects of road provision than men (Turner & Fouracre 1995:91), particularly in poor settlements within the road corridor that do not benefit from location at the road-side itself. This can be attributed, at least partially, to the Tamang's limited cash resources that prevent women using motorised transport more fully, and other mobility constraints imposed on them, by their domestic and household production responsibilities. Perhaps there is a tendency for those involved in road provision and those living nearby road developments, to anticipate more positive change than roads alone can be expected to deliver. As Ghimire has commented upon the expectations that often accompany road construction in Nepal:

> In planning these physical elements [of motorised transport] there has been blanket assumption that they will automatically generate economic growth in the area and everybody, irrespective of gender, economic class and culture will benefit from these units. (1999:6)

While it is indeed naive to expect that road provision alone might effect social and economic development, by their very nature, roads introduce an accelerated pace of change to rural areas of LICs. In communities like Jetthul, it is crucial that project design incorporates components of intervention, both to maximise the development potential of road provision for all members of society, and to avoid possible negative impacts on gender power relations, health and fertility dynamics.

Appendix I

Glossary of Nepali and Tamang Terms

The following list provides a brief description of meaning of Nepali and Tamang terms I refer to in my text. Tamang words are denoted by a superscript "T". Rather than employing a particular phonetic system, I have written Tamang words as they sound and used Turner's (1965) transliteration of the original devanagari where possible.

Bahun	Brahmin
bari	dry fields
bhakari	woven bamboo mats
cetamol	paracetamol
chang	millet beer
chappal	rubber sandals
Cheli Beti	young girls out-of-hours schooling programme
chewar^{T}	Tamang ritual first hair-cutting of young boys
Dasain	the most important and substantial of Nepalese festivals, which takes place in the autumn and is characterised by ritual animal slaughter
doko	large carrying basket
ghar	home/village
ghee	butter oil
ghewar^{T}	funerary rites held on the 49th day after death
goth	mobile animal shelter
ilaka	a sub-district administrative region
jat	caste/ethnic group
jhankri	traditional shamanic healer
kanya daan	"giving of a virgin"
ke^{T}	length of fabric wrapped around the waist
khet	irrigated paddy fields
kodo	millet
lama^{T}	Tamang priest
lhokhor	12-year calendar cycle
lho^{T}	animal year
lipnu	dung and mud paste used for flooring
maiti ghar	natal home or village
makai	maize
matwali	alcohol-drinking (*jat*)
mela	dance/festival

paani nachalne	"water unacceptable"
pakho	grazing land
panchayat	administrative region, renamed *Gaon Bikas Samiti* "Village Development Committee" or "VDC" after 1990
parma	reciprocal labour
pasni	rice-feeding ceremony
pong^{T}	beer
pradhan panch	panchayat leader, prior to 1990
puja	religious ritual
rakshi	rice spirit alcohol
sudeni	traditional birth attendant
thanka	Buddhist religious painting
tika	coloured powder used for ritual purposes

List of Acronyms and Abbreviations

ADB	Agricultural Development Bank
AESWP	Agricultural Extension Services for Women Programme
CBS	Central Bureau of Statistics
CERID	Centre for Education Research Innovation and Development
FAO	Food and Agriculture Organisation
FP/MCH	Family Planning/Maternal and Child Health
FPAN	Family Planning Association of Nepal
GDP	Gross Domestic Product
GNP	Gross National Product
HMG/N	His Majesty's Government of Nepal
IBP	Intensive Banking Programme
ICHSDP	Integrated Community Health Services Development Project
IHDP	Integrated Hill Development Project
ILO	International Labour Organisation
IMR	Infant Mortality Rate
INFRAS	Infrastruktur-, Umwelt- und Wirtschaftsberatung
IPPF	International Planned Parenthood Federation
IRDP	Integrated Rural Development Projects
JTA	Junior Technical Assistant
LDC	Less Developed Country
LJRP	Lamosangu-Jiri Road Project
MEC	Ministry of Education and Culture
MOH	Ministry of Health
NEPC	National Education Planning Commission
NESP	National Education System Plan
NFHS	Nepal Family Health Survey
NGO	Non-Governmental Organisation
NR	Nepalese Roupee
NTV	Nepal TV
PCRW	Production Credit For Rural Women
PRB	Population Reference Bureau
SDC	Swiss Development Co-operation
SFDP	Small Farmers Development Programme
SLC	School Leaving Certificate
TFR	Total Fertility Rate
TFRP	Tamang Family Research Project

UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organisation
USAID	United States Agency for International Development
VDC	Village Development Committee
WDAs	Women Development Associates
WDOs	Women Development Officers
WDP	Women's Development Programme
WFP	World Food Programme
WFS	World Fertility Survey
WHO	World Health Organisation

Appendix II

Determination of best estimate of age

This appendix provides further detail regarding the method of age correction used in this thesis, which was outlined in chapter 3.

Level of agreement between given age and animal year of birth

In the absence of literature supporting reliance on other age-related variables among the Tamang, and given the consistency of reporting birth *lho*, the animal year of birth was taken to be the most reliable of the age-related variables. This was, therefore, used as the constant variable throughout subsequent tests of age parameters, and formed the basis of my development of an age-correcting method.

Development of age-correcting methodology

I began by comparing reported age in years with the age of nearest fit for the given animal year of birth (shown in table 3.1 of chapter 3). In order to facilitate further analyses, the following formula was established to describe the way in which the Tamang age system can be used to determine age in years:

Age in 1991 = 12x + y

Where x is the number of *lhokhor* (12-year cycles completed) and y is the number of additional years determined by the animal year of birth (*lho*).

As 1991, the year in which the survey was carried out, was the year of the sheep, the number of *lhokhor* or completed 12-year cycles, alone denoted age for individuals born in that animal year. For individuals born in other animal years, an additional numerical factor (y) was required in addition to the number of cycles. These are set out in table II.1:

animal year	factor (y)
sheep	0
horse	1
snake	2
dragon	3
goat	4
tiger	5
bull	6
mouse	7
boar	8
dog	9
bird	10
monkey	11

Table II.1: Numerical factors for each animal year, used to calculate age in 1991.

Taking as an example a woman who stated she was 35 years old and born in the year of the snake, using the formula, age in 1991 = 12x + y, her age components should be 12 x 3 (i.e. three completed 12-year cycles), plus the snake animal year factor (y) of 2. Therefore her age of nearest fit according to her animal year of birth is 38 years. This is illustrated by table 3.1 of chapter 3. A discrepancy of three years is therefore apparent between her remembered age and the nearest possible age according to her animal year of birth, which was assumed to be reliable. In this way, age of best fit for animal year of birth was compared with reported age in years for all the women.

Accuracy of reported age

Only 20 women (24%) out of the whole sample of 82 exhibited no difference between their reported age and age of nearest fit according to animal year of birth. A further 24 women (29%) gave ages that were within +/- 1 year of their animal years. As the time of year they were born was unknown, these 24 women were regarded to have given ages which agreed with that according to their animal year of birth. Overall, 44 women, just over half the sample (54%), reported ages that were in agreement with the animal year of their birth.

A further 28 women (34%) gave ages which were between +/- 2 to +/- 4 years of their nearest possible age according to the animal year of their birth and 10 women (12%) reported ages that varied more than +/- 4 years according to their animal year. These results are set out in table II.2.

number of cases	percent	difference between given age and age determined by nearest animal year
20	24	0
11	13	+1
13	16	-1
5	6	+2
7	9	-2
7	9	+3
2	2	-3
5	6	+4
2	2	-4
1	1	+5/-7
3	4	-5/+7
6	7	+6/-6

Table II.2: Difference between reported age and age of best fit according to animal year of birth.

At this stage of analysis, the number of *lhokhor* were regarded not to be of prime importance in calculating age, as animal year among the Tamang appears to be the least fallible of all the age measures (Fricke 1993:53). For women whose given age was within +/- 4 of their nearest animal year age, their age was corrected to the year of best fit according to their reported animal year of birth. The rationale behind this decision was that this group of women were more likely to have:

a) known their animal year of birth
b) made an error in their number of cycles than their animal year, as the former required counting and the latter involved memory of a single significant animal.

For the 10 women for whom there was a greater level of disagreement, in excess of +/-4 years between their reported age and the nearest possible age for their animal year of birth, the reported number of completed 12-year cycles were of more importance in determining true age. Having ascertained the closeness of fit between given age and nearest age according to reported animal year of birth, independently of the stated number of cycles completed, I next examined the reliability of reported *lhokhor*.

Reliability of reported number of cycles (*lhokhor*)

The reported number of completed 12-year cycles was compared with the number required to reach age corrected by animal year using the equation below:

$$\frac{\text{(age corrected by animal year - y)}}{12} = \text{reported number of cycles (x)}$$

Differentials between age calculated according to reported number of completed cycles and corrected age were first calculated only for women whose previous age parameters had indicated a reasonable level of reliability. These were cases where the differential between reported age and nearest animal year age was equal to or less than +/-4 years (n=72). The results of this analysis are shown in table II.3.

differential in *lhokhor*	number of women	percentage of sample
0	11	15
-1	53	74
-2	8	11

Table II.3: Difference in the number of given cycles and the number of cycles in corrected age, for women whose reported age was within +/-4 of their age corrected according to animal year of birth (n= 72).

Of the 72 women whose age parameters agreed by +/-4 years, 74% (n=53) exhibited a disagreement of -1 *lhokhor* between the number of cycles in their corrected age and the reported number of cycles. This suggests that the majority of women under-counted the number of cycles they had completed by a factor of one. Reliance on the Tamang age system of *lho* and *lhokhor* alone, therefore, would have led to over half the sample of 82 women being under-aged by 12 years.

Furthermore, eight of the women whose reported age and animal year age were within a reasonable level of agreement, reported *lhokhor* values that disagreed with their corrected age by -2 cycles. This means that if the Tamang age system alone had been relied upon, almost 10% of the total sample would have had ages calculated that were around 24 years younger than their true age.

Only 11 women reported the same number of *lhokhor* as that indicated by the correcting formula according to the year of closest fit to their stated animal year of birth and given age.

Table II.4 illustrates that of these 11, five women reported age, animal year of birth and number of *lhokhor* that were in agreement. In a further five cases, the given number of cycles was as expected for the animal year of birth, and given age was 'in error' by only one year. As previously stated, due to the unknown time of birth in the year, this was regarded to be accurate.

number of cases	margin of disagreement (in years) between age, animal year of birth & *lhokhor*
5	0
5	+/-1
1	+/-3

Table II.4: Women whose age parameters were in close agreement.

Table II.4 also shows that one woman reported a number of *lhokhor* that agreed with her animal year, but disagreed with reported age by three years. Even allowing a margin of +/- 3 years, only 11 women in the whole sample of 82 can be considered to have reported all three age parameters that were within reasonable agreement. This illustrates that only 13% of women can be judged to have accurately known all three factors concerning their age.

As there were no cases where women over-estimated their number of *lhokhor* and the majority of error in reported number of *lhokhor* was underestimation by one cycle, for the 10 cases where disagreement between reported age and nearest animal year age was greater than or equal to +/- 5 (approximately half a cycle), I applied a '+1 *lhokhor*' rule. In these 10 ambiguous cases, I therefore corrected age up by one cycle.

Difference between reported age and age of best fit according to animal year of birth

Table II.5 shows the frequency distribution of error between reported age and age of best fit according to animal year of birth. In almost 54% of cases the level of error was only between +/-1 year. This illustrates generally close agreement between given year and animal year of birth.

Closer examination of the accuracy of women's reported age was facilitated by comparing the means of the difference between reported age, and age of best fit according to animal year, by 5-year age groups. Table 11.5 illustrates that the 15-19 year age group exhibit the lowest level of disagreement between their reported age and their nearest possible age according to their animal year of birth. The oldest three cohorts have the highest mean level of difference, with the most senior group (women aged between 45 and 49) exhibiting the highest disagreement between reported age and age corrected by animal year of birth.

differential in years	number of cases	percent
-7	1	1
-6	4	5
-5	3	4
-4	2	2
-3	2	2
-2	7	9
-1	13	16
0	20	24
1	11	13
2	5	6
3	7	9
4	5	6
6	2	2

Table II.5: Frequency distribution of differential in years between given age and corrected age.

age range	mean	standard deviation	number of cases
10-14	1.75	1.14	12
15-19	0.53	0.74	15
20-24	1.69	2.29	13
25-29	2.25	1.98	8
30-34	1.60	1.14	5
35-39	3.07	2.34	14
40-44	2.58	1.83	12
45-49	3.33	1.15	3
sample	**1.96**	**1.89**	**82**

Table II.6: Comparison of mean difference between given and corrected age for each 5-year age group.

Error in reported number of 12-year cycles (*lhokhor*) by age group

Figure 11.1 illustrates the difference between reported number of *lhokhor* and the number required to reach age corrected by animal year of birth. It can be seen that the greatest level of accuracy in reported number of cycles was among women of the 20-24 age group. Many of the women in the two teenage groups reported their number of cycles as zero. Assuming that most women in the study were at least in their teens,[1] the majority must have passed through a minimum of one 12-year cycle or *lhokhor*. This suggests that many women tended only to count the cycles they could remember beginning. It appears therefore, that it is only when women remember passing through familiar animal years that they begin to recognise and count passing *lhokhor*.

[1] Women were selected for formal survey on the grounds that their given age was between 14 and 45 years.

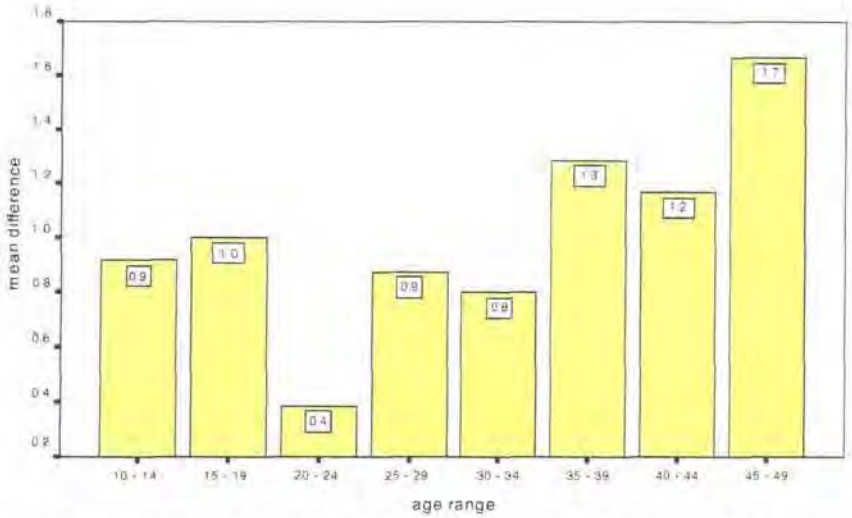

Figure II.1: Histogram illustrating the mean difference between reported number of *lhokhor* and number of cycles according to age corrected by animal year of birth, by age group.

The 25-29 year age group display the same level of disagreement in *lhokhor* as the youngest cohort. The underlying processes also appear similar in that all but one member of each group under-reported their number of *lhokhor* by one cycle. Of the 29 women who formed the oldest three groups, not one gave the correct number of *lhokhor* according to her corrected age. The women in the oldest age groups display a higher margin of error, as a proportion of each cohort misreported their *lhokhor* by two cycles. Women's age therefore appears to have a twofold effect on their age reporting accuracy that is particularly marked in their accounts of the number of *lhokhor* completed.

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